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SESSION 1934

HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND REPORT

No. 1

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TUESDAY, MARCH 13, 1934

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Reference—Hog Grading

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WITNESS:

Mr. L. W. Pearsall (Assistant Chief of Marketing Division), Department of Agriculture.

Appendix A—Production and quality of Hogs by Provinces, 1923-1933.

Appendix B—Schedule of price differentials between various grades of hogs, effective February 12, 1934.

OTTAWA

J. O. PATENAUDE

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1934



## MEMBERS OF THE COMMITTEE

MARK C. SENN, Esq., *Chairman*

### Messieurs

Barber,	Golding,	Senn,
Bertrand,	Goulet,	Shaver,
Blair,	Hall,	Simpson
Bowman,	Hay,	( <i>Simcoe North</i> ),
Bouchard,	Jones,	Smith
Boucher,	Loucks,	( <i>Victoria-Carleton</i> ),
Boulanger,	Lucas,	Spotton,
Bowen,	McGillis,	Sproule,
Boyes,	McKenzie ( <i>Assiniboia</i> ),	Stewart ( <i>Lethbridge</i> ),
Brown,	McPhee,	Stirling,
Burns,	Moore ( <i>Chateauguay-</i>	Sutherland,
Butcher,	<i>Huntingdon</i> ),	Swanston,
Carmichael,	Motherwell,	Taylor,
Coote,	Mullins,	Thompson ( <i>Lanark</i> ),
Davies,	Myers,	Totzke,
Donnelly,	Perley ( <i>Qu'Appelle</i> ),	Tummon,
Dubuc,	Pickel,	Vallance,
Dupuis,	Porteous,	Weese,
Fafard,	Rowe,	Weir ( <i>Melfort</i> ),
Garland ( <i>Bow River</i> ),	Sauvé,	Weir ( <i>Macdonald</i> ),
Gobeil,	Séguin,	Wilson

WALTER HILL,  
*Clerk of the Committee.*



## ORDERS OF REFERENCE

TUESDAY, February, 1934.

*Resolved*,—That the following Members do compose the Select Standing Committee on Agriculture and Colonization.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*

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*Ordered*,—That the Select Standing Committee on Agriculture and Colonization be empowered to examine and inquire into all such matters and things as may be referred to them by the House; and to report from time to time their observations and opinions thereon, with power to send for persons, papers and records.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*

---

WEDNESDAY, March 7, 1934.

*Resolved*,—That the question of amending the Egg and Hog Grading Acts be referred to the Select Standing Committee on Agriculture and Colonization.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*

---

TUESDAY, March 13, 1934.

*Ordered*,—That the said Committee be given leave to print 500 copies in English and 200 copies in French of the evidence to be taken, and of the papers and records to be incorporated with such evidence, from day to day, and that Standing Order 64 be suspended in relation thereto.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*

---

TUESDAY, March 13, 1934.

*Ordered*,—That the following Bill be referred to the said Committee:—  
Bill No. 26, An Act respecting Fruit.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*



## REPORTS TO THE HOUSE

### FIRST REPORT

TUESDAY, March 13, 1934.

The Select Standing Committee on Agriculture and Colonization beg leave to submit the following as a,—

### FIRST REPORT

Your Committee, recommend that 500 copies in English and 200 copies in French of the evidence to be taken, and of the papers and records to be incorporated with such evidence, be printed from day to day, and that Standing Order No. 64 be suspended in relation thereto.

Respectfully submitted,

MARK C. SENN,  
*Chairman.*

# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

TUESDAY, March 13, 1934.

The select standing committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon.

Mr. Senn, the Chairman, presiding.

*Members present:*—Messieurs Bertrand, Blair, Bouchard, Boulanger, Bowen, Boyes, Burns, Carmichael, Dupuis, Fafard, Garland (*Bow River*), Gobeil, Golding, Hall, Loucks, McGillis, Moore (*Chateauguay-Huntingdon*), Motherwell, Mullins, Pickel, Porteous, Rowe, Seguin, Senn, Shaver, Simpson (*Simcoe North*), Smith (*Victoria-Carlton*), Sproule, Stirling, Taylor, Thompson (*Lanark*), Totzke, Tummon, Wilson, and Hon. Mr. Weir (Minister of Agriculture).—38.

The Chairman read the order of reference (*re* hog grading), Dr. E. S. Archibald of the Dominion Central Experimental Farm, was called and extended an invitation to the committee to visit the Central Experimental Farm at Ottawa, and see the work of the various branches there.

This invitation was accepted and the following members named as committee, to make arrangements for the visit: Messieurs Pickel, Totzke, McGillis.

Mr. L. S. Pearsall, assistant chief of the marketing division of the Department of Agriculture, was then called and examined on the subject of hog grading.

Mr. Pearsall agreed to file with the committee the prices paid for hogs over a period of the last ten years.

The witness also agreed to furnish the committee with a record of the increased per capita consumption of hog products since the grading of hogs has been in effect.

On motion of Mr. Boyes,

*Resolved:* That the committee do report and recommend that 500 copies in English and 200 copies in French of the proceedings and evidence to be taken, and of the papers and records to be incorporated with such evidence, be printed from day to day, and that Standing Order No. 64, be suspended in relation thereto.

The committee then adjourned to meet again at the call of the chair.

WALTER HILL,

*Clerk of the Committee.*





## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

MARCH 13, 1934.

The Select Standing Committee on Agriculture met at 11 o'clock, Mr. Senn, presiding.

The CHAIRMAN: The object for which this meeting was called together this morning was to consider the reference made by the House of Commons respecting the question of amending the Egg and Hog Grading Act. Before we enter into that, however, I would like to say that I had a letter from the Minister of Agriculture stating that he thought it might be of interest to the members of the committee to visit the experimental farm here at Ottawa to get some idea of what is being carried out at that place. Dr. Archibald, who is at the head of the experimental farm section of the Department of Agriculture, is here to-day, and I would ask Dr. Archibald to say a few words to you with respect to that matter. I think Dr. Archibald has very definite ideas to present to the committee.

Dr. ARCHIBALD: Mr. Chairman and gentlemen: realizing how busy you have been in the last two or three years and how difficult it has been for members of parliament to get out to the experimental farm and the ease with which you can lose contact with investigational work in agriculture, I spoke to the Minister, Mr. Weir, in December, suggesting that possibly early in the session, before you became too much involved in committee work, you might be able to enjoy two, three or four Saturday mornings or Saturday afternoons at the farm. I suggested Saturday thinking possibly it would be easier for a greater number of you to get away at that time, although it is quite immaterial to us when you come. The Minister thought the idea was worth taking up with the Chairman of the Agriculture Committee, Mr. Senn, and Mr. Senn asked me to come in and say a word this morning before you started your business. All of the fourteen departments of the experimental farm at the Central Experimental Farm at Ottawa are exceedingly busy at this time of the year, and there is a great deal of very interesting work going on, largely research work in agriculture and dealing with vital problems both of production and indirectly also with marketing, and I think if you could spare two or three hours on two or three occasions we could give you at least an idea as to the development of research in these various lines of work.

As to transportation, if it will be of any assistance to you, if you decided definitely on a time to come or times to come, I think that with the two cars that we have and a bus and a number of our staff members' privately owned cars we could very easily organize transportation from here to the farm and from the farm back again, thus saving you time and, perhaps, in that way encouraging as many to come as possible.

However, that is immaterial as long as you do come and see the work which is under way.

I will not take time to enumerate all the phases of work we are doing, but perhaps I might just cite a few instances. Might I suggest that on one occasion you take animal husbandry and poultry. In animal husbandry valuable breeding work is going on as well as nutritional work dealing with many of the



important problems of eastern Canada. While the animal husbandman would be briefly describing the work to you he could also tell you something of the work that is being done in the west and in the eastern provinces. The nutritional work which is under way at the present time in nutrition, in steer feeding, is highly scientific, dealing with home grown roughages and one or two commercial problems. For example, one of the commercial oat feeds which we have been working on for a long time is nothing but oat hulls and should be sold as oat hulls. Incidentally, the work we have done, contrary to the work being done in research stations at Wisconsin, has resulted in the company now selling this as oat hulls and not oat feed—a very important factor to the dairy-men of eastern Canada who buy this food. These matters require careful nutritional work dealing largely with some of the eastern problems of roughages home-grown feeds and research work carried on exhaustively into Soya bean meal, a new product which I think is going to be of great value to the livestock men of eastern Canada as the bean industry develops.

In swine work we are dealing largely with the problem in co-operation with the livestock branch with the problem of breeding in relation to advanced registry of hogs with the idea of producing an ideal bacon hog. Our nutritional work also in co-operation with the livestock branch is along these lines, and of feeding for an ideal bacon hog.

Then there is sheep work, dealing with the two pertinent problems of eastern Canada—the problem of roughages for breeding ewes, and some of our work deals with pasture and pasture improvements, hence early lamb production with a minimum of grain feed.

Those are a few illustrations of the work which is going on in the animal husbandry division.

In poultry we are doing a lot of very important work in genetics and nutrition, some of the work being of a scientific nature, and all leading to the practical solution of better and heavier laying poultry and cheaper and better finished market poultry meats. We are also conducting work in the egg laying contests, in the study of housing methods, and doing a great deal of work in cooperation with the Health of Animals branch in developing means of controlling diseases and parasites. I would suggest that a morning or afternoon spent in just going over these phases of the work would be exceedingly interesting, and I think our men can quickly show the significance of the work in regard to eastern and western animal husbandry and poultry production.

I think another afternoon should be spent with our cereal and forage crop division. Mr. Newman, our dominion cerealist, has a number of promising new things in the greenhouses in new wheats which are rapidly reaching the bulking stage which have all the qualities of Marquis in respect of earliness, yield and milling quality, and still earlier dates of maturity than Marquis—something like Reward or Garnet or other varieties which are not considered as valuable as Marquis. We also have disease resisting new hybrids almost ready for the bulking stage; some of them have already been bulked for two years, and in another year will be ready for distribution. New selections of Reward are promising almost as well as Marquis.

Then there is the cleaning plant, and its influence on the production of high-class commercial grain. I think it will be worth while spending a little time in inspection and discussion of the influence which it has already had in certain centres, and the work which is being undertaken towards developing amongst the farmers through the grain elevator companies and other channels means of distributing higher class seed, looking toward the production of a higher class commercial grain or a higher class seed as the case may be.

In the forage crop division splendid work has been done both in research and the more practical aspect of forage production. In this division and field husbandry, our great pasture problems of eastern Canada are receiving careful

attention. Some phases of that work are shown in the greenhouses, particularly new grass species which we are hoping to introduce into eastern pastures. Discussion of that work could take place on the ground more advantageously than here in the agriculture committee. Probably there is no problem in the production of meat or milk or mutton in eastern Canada which is of more importance than our pasture problem.

Then I think, perhaps, a part of a day spent in our horticultural division would be very valuable indeed. Some of our horticultural problems in eastern Canada are becoming very acute. The breakdown of fruit due to drought, spot, corky core and other physiological diseases is serious in all the large fruit producing areas, and some of these symptoms are not discerned until the apples have been stored or even marketed. The loss is becoming greater every year, and the nutritional studies which are going on in the horticultural division, both at the Central Farm and amongst the farmers' orchards in the laboratories and even in the greenhouses, are tackling this problem in the most intensive manner. As this applies to apples, so we have these nutritional and physiological disorders in small fruits and in vegetables as well.

Then we have the whole problem of by-products. We are doing good work. We have a nice laboratory and a small but active corps of workers on this problem of handling by-products of fruit, particularly apples. From Nova Scotia to British Columbia in the fruit-producing areas there is no problem that is more acute than that of taking care of the surplus and all low grade fruit, and how this may be done either through cider, sweet or alcoholic brandies or concentrates which may be used for reinforcing the ciders of countries where cider consumption is great—I suggest Great Britain—or by dehydration, evaporation or canning—whatever the problem may be, we are attempting to undertake it in what I think are our well manned laboratories.

These are two aspects in horticultural investigational work which I think you could advantageously spend some time in going over.

This is also true with the other divisions—plant pathology, greenhouses and laboratories where plant disease studies are under way. The development of disease resisting varieties of everything from cereals to potatoes and tree fruits is being investigated. These have some local application to all Canada and to everyone who is interested in agriculture.

I will not take time to mention the other divisions, but what I wanted to do was to give you a little idea of the tremendous amount of work that is going on. We are tackling the vital problems of production and, in consequence, also of marketing. We would be delighted to have the opportunity to go over our work with you and explain it to you, and to show you the experimental farm system which is, after all, the largest agricultural research unit that exists on this continent or, perhaps, on almost any other continent, and we would like to get your suggestions and criticisms of the work. I thank you very much.

The CHAIRMAN: I think the thanks of this committee are due to Dr. Archibald for the kind invitation he has extended to members of the committee to examine the work which is under way at the Central Experimental Farm. I would suggest that a small sub-committee composed of Messrs. Pickel, Totzke and McGillis, be appointed to arrange this matter, and it can report at the next meeting.

The CHAIRMAN: The object of the meeting to-day, as I have already stated was to consider the reference made by the House of Commons that the question of amending the Egg and Hog Grading acts be referred to the select standing committee on Agriculture and Colonization. First of all, I think we should pass the usual motion in regard to the printing of the evidence, that the committee do report and recommend that five hundred copies in English and two hundred copies in French of the evidence to be taken, and of the papers



and documents to be incorporated with such evidence, be printed from day to day; and that standing order No. 64 be suspended in relation thereto. Will anybody move that?

Mr. BOYES: I move that.

Mr. PORTEOUS: I second it.

Carried.

The CHAIRMAN: Now, gentlemen, may I make a further suggestion to the committee; it may not meet with your approval, but it is only for the purpose of facilitating the work. You will note that there are two separate acts to be considered by the committee, and I am going to suggest to the committee that we consider them separately and not get them mixed up in our evidence, and the reports of our committee. This morning I have invited Mr. Pearsall, the head of the hog grading division, to be with us to outline the act and the regulations, as they are at the present time. Are the committee in favour of considering the Hog Grading Act first? It seems to me it would be in the interests of getting along faster.

Carried.

Hon. Mr. MOTHERWELL: They are really regulations under the Livestock Act.

The CHAIRMAN: Yes. Are the committee ready to hear Mr. Pearsall?

Carried.

L. W. PEARSALL, called.

*By the Chairman:*

Q. Will you just tell the committee what your position is in the Department of Agriculture, Mr. Pearsall?—A. My official position in the department is assistant chief of the marketing division. In the re-organization recently hog grading was taken over by the marketing division. I have been very closely connected with hog grading, previous to that, in the province of Ontario, and since the first of September of Ottawa.

Mr. Chairman, Hon. Mr. Weir and gentlemen: At the suggestion of your chairman I have prepared a brief report of our hog grading policy in relation to the swine industry in this country. You will appreciate that such a brief report must, of necessity, be very general in character, and I realize that you may wish more specific detailed information which I shall be pleased to give you later. For the purpose of accuracy and brevity, I shall read this report:

The hog grading regulations were introduced in the fall of 1922. A general conference of swine producers, packers' representatives, commission agents and government representatives had met to consider the problem of marketing Canadian bacon on the British market in competition with other continental countries. This conference recommended to the Department of Agriculture that a system of hog grading be established. It should not be concluded, however, that because live grading was adopted that it was deemed the best method of grading hogs. Grading was recommended as being essential. Rail grading was admittedly the more efficient method of grading, but no solution could be suggested for a system of rail grading that would be practical under Canadian conditions of marketing and slaughtering. The difficulties were mechanical in respect to Canadian methods of operating packing houses, and geographical in the necessity of moving hogs long distances from point of origin to a slaughtering centre.

The grading of hogs alive was without precedent; therefore it was to be expected that changes and improvement would be necessary from time to time. The original regulations were only compulsory to the extent that all hogs had to be graded. It was assumed that if hogs were bought by the packers on grade, it would automatically benefit the producer. This did not prove to be

the case as, in many instances, drovers and shippers misrepresented conditions to the farmers and took advantage of this voluntary system. The regulations were therefore amended, requiring drovers and shippers to either grade or mark each farmer's lot of hogs, and settlement made to the farmers on the basis of such grades. Later further difficulty developed in that, while drovers and shippers were required to buy hogs on grade from the farmers, there were no restrictions as to the methods of purchase or sale by commission agents and packing houses. The regulations were therefore amended on January 30, 1932, requiring all hogs to be purchased on a graded basis.

The act of mechanical separation of hogs into various grades will not improve the quality, but it does provide first, a basis of sale according to quality; and secondly, interpretation of market requirements. It is therefore essential that if the grading of hogs is to promote the improvement of quality, the price advantage for good quality made get back to the producer, and also information as to the quality of his hogs, so that he will know to what extent he is satisfying market requirements.

It is obviously difficult to set up regulations that are applicable to the variety of marketing conditions existing throughout Canada. Our regulations are looked upon more as an instrument of education than law enforcement. The administration of these regulations is not with a view to enforce the letter of the law where it might be an inconvenience to the trade, but rather that conditions of fair competition are maintained.

There are features of hog grading that are criticized and that are considered irksome by certain sections of the trade. There are certain conditions that might be improved, but no one realizes this more than our department which is responsible for the administration of these regulations. Admitting these minor deficiencies, however, the general policy of grading, as to whether or not it is justified, should be considered on the result of the past eleven years.

Hog grading was established for the purposes of improving commercial hogs. For your information, I am submitting the hog production in each province from 1923 to 1933, together with the percentage of hogs falling within the respective grades. (Appendix A). These figures are available for your information and I will not take time to analyze them in detail.

As previously stated the grading of hogs is ineffective unless grades are used as a basis of purchase. Trading on the basis of government grades has become a general trade practice on all markets except Montreal. Previous to the amendment of the hog grading regulations on January 30, 1932, requiring the purchase and sale of all hogs on a graded basis, there was no jurisdiction over the method of trading at stock yards. The amendment to the hog grading regulations giving such authority has not been given enabling legislation by the province of Quebec, and, therefore, the hog grading regulations in respect to Quebec hogs are non-effective.

The province of Quebec and eastern Ontario are most directly affected by the Montreal market. What is the general result of the Montreal method of trading in hogs on the area affected by this market as compared to other areas? Following is a comparison of the trend of quality and production in eastern Ontario and Quebec as compared with other provinces in Canada:

Province—	Percentage of	Percentage of
	Selects	Selects
	1923	1933
Alberta.. . . .	2.4	7.9
Saskatchewan.. . . .	4.8	11.8
Manitoba.. . . .	8.2	17.1
Ontario (W.).. . . .	22.6	25.5
Ontario (E.).. . . .	13.4	9.5
Quebec.. . . .	10.9	9.3



While this does not indicate the improvement of quality in other grades, it shows the general trend of quality.

In 1929, the grades were changed to the present classification of selects, bacons and butchers. It is, therefore, possible to make a further comparison of the volume of hogs, qualifying for the two top grades for this four-year period:

Province—	Percentage Selects and Bacon Grades combined, 1930	Percentage Selects and Bacon Grades combined, 1933
Alberta.. . . .	27·0	40·5
Saskatchewan.. . . .	22·1	44·8
Manitoba.. . . .	40·8	58·5
Ontario (W.).. . . .	80·2	81·5
Ontario (E.).. . . .	48·2	38·4
Quebec.. . . .	38·3	38·9

*By the Chairman:*

Q. I should not interrupt you, but just there, can you give us the percentage for the whole country of selects and bacons?—A. I could in a moment.

Q. All right?—A. The trend of production is also significant over a ten-year period 1923-1933. The hog production in the province of Alberta increased by 625,784 or 154 per cent; the province of Saskatchewan increased production 291,060 hogs or 146 per cent; the province of Manitoba increased 88,271 hogs or 56 per cent increase; western Ontario decreased 15,819 or 1·31 per cent. (It might be noted that the reduction in this area was largely in south western Ontario, where the decrease in corn acreage was largely responsible for the reduction in hogs). Eastern Ontario decreased production 135,697 hogs or 54·7 per cent decrease, and the province of Quebec decreased 26,235 hogs or 28·6 per cent decrease.

This analysis definitely indicates that in the area which is most directly affected by the Montreal market, the quality of hogs has not only deteriorated, but there has been a drastic decline in the volume of production; this in direct contrast to other parts of the dominion.

*By Mr. Dupuis:*

Q. What makes the difference between the Montreal market and the other markets? What is the difference in the laws applying to that province? I understand there are special regulations applying to Quebec?—A. I just explained in my report that our hog grading regulations have not got enabling legislation in the province of Quebec. Therefore they are non-effective as far as Quebec hogs are concerned.

Mr. GOBEL: I would like to put some questions to the witness on that point, but I think we had better wait until he has finished.

The CHAIRMAN: Yes.

The WITNESS: I shall be pleased to answer that question later. This area has not only the highest market for hogs but has also a general type of farming naturally adapted to hog production.

A criticism frequently directed against the present system of grading is that the discounts for the lower grades are arbitrarily set, and, sometimes it is intimated, with the approval of our department. The only price differential for which the department assumes any responsibility is the premium on select hogs, which was a general agreement between the packers and producers with the department as a witnessing party. Our regulations state that "Settlement should be made on the basis of official grades with price differential between the grades," but there is nothing to indicate what the differential shall be between the various

grades. Our department has never interfered with a farmer or his agent in selling any grade of hogs for all that any market will pay. The differential between the various grades, except for the premium on selects, is left for the trade to determine.

For your information, I am filing a record of the price differentials between various grades on all markets in Canada, effective February 12, 1934 (Appendix B). These figures indicate that certain grades of hogs sell to better advantage on some markets than on others, and these differentials may vary from week to week for sales on the same day. For example, lights and feeders at certain times when they are in demand will sell at a price almost equal to the bacon grade, while at other times when there is an over supply of this grade, the selling price will be considerably lower.

It is significant that all other countries shipping bacon to Great Britain grade hogs as carcasses after slaughter, and recently such a system was introduced in England. While a system of live grading permits a general selection of hogs, according to quality on the basis of type and finish; the uniformity of fleshing, quality of fleshing, and firmness of fat, which are important in determining the actual value of hogs, cannot be determined except by analysing the carcass rather than the live hog. Furthermore, the variations in shrink, dress, and method of weighing make it impossible to efficiently classify hogs according to weight limitation under a system of live grading. As previously observed when grading was introduced, any system of rail grading was not considered feasible under our conditions. The introduction of trucking as a means of transportation and the decentralization of packing plants have radically altered conditions as they existed in 1922 as compared with the present time. Experimental work has provided a solution for the major problems in connection with slaughtering and marketing.

On the advice of the Joint Swine Committee, the department, therefore, recommended the amendment of the hog grading regulations to permit, on a voluntary basis, the grading, purchase and sale of hogs on a carcass basis. A copy of the order in council covering this amendment is attached to the printed regulations. This we believe to be a step in the right direction towards providing a more efficient and more intelligent grading service.

May I submit to your committee that we appreciate your interest in a policy that vitally affects all hog producers, and further that we welcome your consideration of the problems of swine improvement in Canada. Bacon exports for the past year were only 25 per cent of our quota agreement. The volume of hogs exported was equivalent to approximately 596,000 live hogs while the total of all selects marketed was only 522,509. It is of vital importance that during the period of our quota agreement we establish our position on the British market both in respect to volume and quality of our product, to facilitate negotiations for further agreements at the end of this period. The importance of Canadian hogs is, therefore, of immediate national importance. Thank you.

*By Mr. Smith (Victoria-Carleton):*

Q. Would you tell us what provinces in Canada have passed enabling legislation so far as hog grading is concerned?—A. All except Quebec.

Q. Have the maritime provinces passed enabling legislation?—A. Yes.

*By Mr. Fafard:*

Q. Why is it that in giving the statistics you divided Ontario into eastern and western Ontario? Would it not have been fair to take Ontario as a whole?—A. I simply separated eastern and western Ontario because eastern Ontario is most directly affected by the Montreal markets. Hogs going to Montreal separate at about Belleville. Hogs the other side of Belleville go to Toronto as a rule, and the hogs this side of Belleville go to Montreal.



*By Mr. Tummon:*

Q. Do you count all Hastings county in eastern Ontario?—A. Yes.

Q. But they all don't go there?—A. That is quite correct. There are 70,000 hogs coming from western Ontario to Quebec. It is impossible to draw a definite line where they separate.

Q. You gave figures with regard to the number of grades going into Montreal; how do you obtain those figures if they are not graded?—A. All the hogs are graded in Montreal. They might—

Q. By your officials?—A. They might not be sold on grade. They might not be delivered on that basis; but they are graded nevertheless.

Q. What percentage of hogs did you say went to Montreal from Western Ontario?—A. I could not tell you that. I do know that during the first six months of last year fifty-five thousand from west of Toronto went to Montreal.

Q. Could you give us an idea of what that would amount to in percentage?—A. About three per cent, I would say.

*By Mr. Loucks:*

Q. What about Saskatchewan? What percentage goes right through from there to Montreal?—A. From Saskatchewan 9 per cent went to Montreal.

Q. Is that the per cent for export?—A. I could not tell you that.

*By Mr. Rowe:*

Q. What percentage is sold on grade—it is voluntary there, sale on grade?—A. It is voluntary. Up until last year the hogs handled by the Cooperative Federee were sold with a premium on selects, and there would be a discount on heavies and lights. About nine months ago they all agreed to pay a premium on selects, and a premium on selects has been paid on the Montreal market for the last approximately nine months; but there is no discount on butcher hogs on the Montreal market.

Q. Is the premium paid by the Dominion government?—A. By the buyer, or the packer; we pay no premium.

Q. In dealing on the Montreal market all grading is voluntary?—A. Absolutely.

Q. The packers paying the premium themselves, the department not interfering?—A. Yes.

*By Mr. Pickel:*

Q. Grading on the Montreal market, Mr. Pearsall, is done principally to assure prices?—A. What do you mean by that?

Q. I mean that on the Montreal market the price paid depends on the result of the grading?—A. Not necessarily, because there is a very small percentage of hogs dealt in on grade.

Q. What is the difference in exports between 1922 and 1930?—A. Offhand, I would say there would be a lot more hogs exported in 1922 than in 1930. We had a big national problem at that time with exports.

*By Mr. Dupuis:*

Q. Could you put on record the price for each year of the different qualities over the last ten years?—A. I could on the markets on which they were traded on the various grades; on Montreal up until about a year ago they were more or less on a flat price for the top grade.

Q. Have you got in hand the prices obtained since 1920 year by year?—A. I could make that available if you wish, sir.

Q. Could you put that on record?—A. Yes.

Q. How do you determine the percentage between bacons and butchers?—A. By the grading differential.

*By Mr. McGillis:*

Q. In weighing the butchers and bacons are all weighed together, how do you determine the percentage of bacon and butcher hogs when they are all weighed together?—A. On markets like Toronto, Winnipeg, Calgary, the car lot is weighed together, with none of the grades separated. Afterwards it is just a case of counting, they are separated into grades, and a statement is made on a per head basis, with a dollar paid per head for selects, a dollar discount for butchers, and that eliminates the necessity of weighting these grades.

Q. Butchers and bacons weighed together?—A. So are selects.

Q. I do not know how you could determine the percentage of butchers and bacons where you have them all weighed together?—A. By the grading differentials.

*By the Chairman:*

Q. Let me ask a question or two just along that line, if I may? Can you describe to us, Mr. Pearsall, exactly the procedure on a hog market when a lot of hogs come in?—A. To a packing plant, or to a stockyard?

Q. Either one? Let's take a stockyard; or a packing plant if you prefer?—A. All hogs arriving at packing plant are kept separate in pens in the car lots as they arrive, and before they go to be slaughtered they are taken out and separated into their various grades. Now, in some cases—

Q. That is done by the government grader?—A. Yes. That may not be a complete separation in this way, as there may be only two or three lights in the load, and unless the seller wishes to have them taken out to weigh them—they would be separated out and then the number of selects counted, and the number of bacons, the number of butchers, and so on; sows, stags and extra heavies are weighed out, and the car is put back in the pen ready for slaughter.

Q. And does a certificate issue?—A. A certificate to that effect is issued.

Q. For all the grades, or just the top grades?—A. For all the grades. As a matter of fact most of the packing plant auditors will not pass settlement on hogs unless that certificate is issued.

Q. Another question, how about stockyards?—A. The hogs are graded there, but not in the same way exactly.

*By Mr. Bertrand:*

Q. What is the procedure that is followed in Montreal?—A. In the plants they are separated out, as they are graded—they have a grading unit at Canada Packers. Some of the hogs coming into the yards are being sold in some cases on a flat basis. We have no jurisdiction over them for grading. The commission man does not wish to have them graded. If the hogs have been dealt for on a graded basis they are taken out and separated into the grades. There is a peculiarity there that the commission men generally feed their hogs as full as they can, and they do not wish these hogs to be disturbed. Therefore, in actual practice what happens is that the hogs are graded before they go on feed, into selects, bacons and butchers; and if there are any heavies or lights these are marked and the commission men take these hogs out and weigh them separately; but they don't like us to do this after hogs have been fed. That is the procedure we worked out in Montreal, because the commission men do not wish the hogs to be interfered with after the hogs go on feed, and most of the hogs are fed on the Montreal market.

*By Mr. Smith (Victoria-Carleton):*

Q. If I heard your figures correctly you stated there was a very great reduction in the Montreal area in the number of selects coming out of the market, and so on; to what do you attribute that?—A. I attribute it to the



fact that the farmer raising good hogs gets no encouragement to do so. In other words, you go back into the back areas and there was improvement for a while; the farmer had gone ahead and put in good breeding stock and tried to raise good hogs, with some success. When it comes to the matter of selling them, there is no advantage to the man; his neighbour can go right ahead and sell butcher hogs, poor quality hogs, for the same amount of money, with the result that he became discouraged.

*By Mr. Blair:*

Q. You mentioned figures to indicate the improvement that has been made in hog production; could you give us figures to indicate how many selects have been produced; and where the greater percentage of selects comes from?—A. I could give you the percentage of selects in western Ontario, taking Ontario from Belleville, west; 23.5 per cent selects during the past year.

Q. Has that been the improvement during the past year?—A. That has been the increase since 1921.

*By Mr. Totzke:*

Q. What is the percentage of hogs slaughtered in Toronto and exported in comparison with Montreal?—A. We have no figures available for individual plants exporting. Until recently very few hogs have been exported from Montreal.

*By Mr. Mullins:*

Q. Who are the principal buyers in Montreal, and then in Ontario?—A. The two main buyers in Montreal are Wilsill's and Canada Packers.

Q. Who are the principal buyers?—A. The principal buyers are Canada Packers.

Q. Canada Packers?—A. Yes.

Q. In Montreal?—A. Yes.

Q. Would there be any truth in this: that four carloads of hogs left Lethbridge and arrived in Winnipeg and were fed and were sold in Winnipeg to a Montreal buyer, and 84 selects were sold out of these four cars of hogs, the balance of the hogs were shipped down to Montreal, and the hog grader came along and graded the hogs in Montreal, and then came to the shipper and said, how many selects did you get in Winnipeg, and the shipper said there were 84 in Winnipeg; well he said, I can only find eighty here—when they got to Montreal. Now, if that story is true; I substantiated it, I followed it up; I heard it on the Toronto market, and I followed that story through to Montreal?—A. Is that a recent occurrence, sir?

Q. It was a little while ago, I can't tell you the date exactly.

Mr. DUPUIS: What is the name of the hog grader?

The WITNESS: If the gentleman would give me the date I will check that, but I can't quite believe in that happening, sir, for these reasons—

*By Mr. Mullins:*

Q. I can guide the committee on that, that is all true, as I followed it up to Montreal and found out that after the graded hogs, the selects, were sold in Winnipeg, then the grader went at them in Montreal, and found eighty more in the car. Gentlemen, hog grading is a system that is absolutely against the farmer. I am making that statement after 50 years of experience with yards. I have watched it. The hog business has been in the hands of a monopoly, and there is still that monopoly in the yard.

Mr. FAFARD: How do you know that statement? We know by the statement that Mr. Pearsall has made that production has increased where hog grading has been established by enabling legislation in any province.

Mr. MULLINS: I believe that these hog graders, who are agriculture students, could be sent out into the country to do right good work teaching the farmers about the type of hog that should be raised—some of the farmers, not all of them, know the kind of hog to raise. I worked there; and it is absolutely against the farmers, and against the interests of the farmers and is in the interests of the packers. Now, I am not interested in any packing plant, I was at one time, I will admit; but I have been on the yards—I have retired, but you let me in there with a bunch of cattle—

The CHAIRMAN: Excuse me, Colonel; the witness is here and I think at the present time questions should be asked to get information, and this discussion can come later.

Mr. MULLINS: The point I wanted to make is that if the packer or the buyer can get into a bunch of hogs and select them it is just like a buyer and a bunch of cattle; if a man sells a fair bunch of cattle to a buyer he gets the best of it by a long way, than he would if he lets the buyer into them to select them. I know that from experience because that was my business. The same thing is applicable in hogs, when they are brought down to the company, the salesman at the yards go to him and say—99 per cent of them say to him, "For God's sake do something to get rid of these hog graders, they are afraid to talk out in the pens" I make that statement because it has come to me from every principal market and that includes Montreal, Toronto, Winnipeg, and all the markets of the west; and they are afraid to say anything for fear they will be left with their product in the yard—and other products that they are selling—and they have asked me to say it here, and say it strongly. I have done my duty now, and I do not know how I can make it any stronger than to make that statement, that 99 per cent of the men doing business have asked me that, and when asking me that, they have said, "Don't mention our names."

Hon. ROBERT WEIR: Just one question there, Colonel, does the grading of these hogs by hog graders change the hogs in any way in the yards?

Mr. MULLINS: It changes it this way, that in the analysis of the prices—here is a man that we take \$2.50 off the hog, and \$1.50 off a hog, and take these deductions. The little dollar that he makes on the premium hog is not anything to what he would have if you go down the line with him—any man that has gone into the yards will know that, it is absolutely against him in the final analysis—if he walks into the yard with a carload of hogs and puts them into a pen and says to the packer, I want to sell that carload of hogs, and I want so much for that carload of hogs—let the packer grade them, or do what he likes with them; and if he doesn't like the hogs he can leave them alone—that is the only way to do business, and by that way you can create more competition. I can go to Montreal, Toronto or Winnipeg; there are errors in the system that you have now. You were speaking of that, and it is against the farmer's interests.

Hon. Mr. MOTHERWELL: I do not like to put myself against such a good authority as Colonel Mullins, but I might point out that I understood that these regulations are not enforceable in Quebec, because there has been no enabling legislation passed there; consequently it is not a fair comparison to take a grading made in Winnipeg and a grading made in Montreal, because there is no relationship between the two. As far as I can recall Montreal is distinctly a local market, and there is very little export that I know of.

Mr. TOTZKE: Has the grading done at Montreal been done by government graders?

Hon. Mr. MOTHERWELL: The Minister could tell you that, I do not know.

Mr. TOTZKE: What is the difference?



Hon. Mr. MOTHERWELL: I think the principal difference is that they are not enforceable by law, for the simple reason that hog grading is only done by the authority given by each province to the Dominion to go ahead and do it; otherwise you cannot enforce the Act. I understand that all of the provinces have done that except Quebec. These regulations are not in force in Quebec, but they have a modified form of them and use them to suit their requirements; but you can't make comparisons between Montreal and other markets for the reasons I have indicated. They have adopted that policy because there is such a diversified demand in Montreal that it makes it an exceptional market, largely for home purposes; and I am not having a word to say against that. Montreal gets a lot of its hogs from the west, as well as from Ontario when there is a scarcity of them in Quebec. But the main point there is that one of the provinces has not seen their way to introduce these regulations, simply because they had a distinctly and decidedly local market of their own in the shops of Montreal. I think that is the situation, is it not. What happened in relation to Colonel Mullins' statement is the practice at Winnipeg of segregating hogs when a car is going through to Montreal.

The WITNESS: I might say in passing that there is a certain volume of hogs bought in the Winnipeg markets and sent through to Montreal that are what you call "tail ends" within the various loads. Now, it would be foolish for me to say that this instance is incorrect. I would certainly like an opportunity of having the facts to investigate because we have heard these rumours around the yards for years, and we are always trying to trace them down. I don't see how it could happen, for these reasons: every carload of hogs that goes on to the Montreal market, where it is from a western yard, has either got to be accompanied by a manifest from the shipper, or an official grading certificate showing that they have been graded in the western yard; that load of hogs is not moved until either one of these is provided, so we know whether that load of hogs is graded or not. We have the shipper's manifest, or we have the official certificate, showing the grading, that would accompany the shipment to Montreal.

*By Mr. Sproule:*

Q. Who gives the official certificate?—A. Our grader.

Q. Is it a fact that sometimes the packing houses do their own grading?—

A. A certain percentage of the grading is done by the packing houses. We will take, for example, a local assembling point such as Gunn's of Toronto or Kitchener, where two packing plants are taking in hogs at one time and grade them—but that is only at points where we do not maintain a man.

Q. That applies to all the packing houses. If the man is not there the packing house goes on and grades them themselves?—A. Yes. At such plants as Canada Packers in Montreal and Toronto we maintain a man there all the time.

Q. He has the right to grade if the grader is not there?—A. Also the seller has the right, if he is not satisfied with the packer's grading, to hold until our man is available.

Q. Is it not a fact that if you do not get a grader in hogs, you get a poorer grade?—A. No, sir; it is not.

Q. I think you will find that in most men's experience—it does not matter whether it is a farmer or not—they get a worse grade?—A. That is true in actual fact, but what happens is this: you take the percentage of selects—the quality of hogs always lowers from the 1st of September on. Every farmer knows of the fall drop, and he starts to ship his hogs out. His taxes come along, and he starts to ship to market. His hogs are light, and the grade goes down. Take the summertime, when prices are usually stable, the percentage of selects is larger and the quality improves; but take a touchy market which is liable to fluctuate and the hogs will get poorer.

Q. I can show you papers where hogs sold for 25 cents a hundred more in Montreal, and other hogs went to another packing house at the same time exactly and when they came back there was \$1.60 difference simply because they graded them that way to balance the price.

*By Mr. Porteous:*

Q. I would like to know what system the packers follow in connection with their grading?—A. Each plant has more or less a system of its own in grading; it all depends on the type of business they are doing.

Q. There is no uniform grade they recognize?—A. There is for exports but not for domestic trade, because a carcass can be cut up into so many domestic cuts.

Q. What are the uniform grades for export?—A. Our department recently established standards for export grades which can be supplied to you.

*By Mr. Totzke:*

Q. Did the witness say that Canada is the only country that uses this method of grading—live grading?—A. I do not know of any other country. In the United States they deal in hogs on what you might call a quality basis, but it is done by the trade in the stockyards.

*By Mr. Porteous:*

Q. Is there any data that would indicate whether or not pork products have increased in quality over the period that this hog grading act has been enforced?—A. That would be difficult to answer, sir; I would not attempt to.

*By Mr. Garland:*

Q. Do we grade carcasses suitable for export?—A. That was instituted recently, in the last month or so.

Q. What was the chief reason for introducing that regulation?—A. To obtain uniformity for Canadian bacon going overseas.

Q. Had you found there was not uniformity?—A. Of necessity, yes, because as hog production increased the production swung to western Canada, and, as indicated in these figures, it was necessary to have a larger volume of our exports come from western Canada. That is an entirely different type and quality of hog to what we have in eastern Canada.

Q. Did you find last year that the packers tried to load the market?—A. What do you mean by that, sir?

Q. Ship a lot of stuff that was not up to grade?—A. They, of necessity, shipped a lot of stuff they did not want to ship themselves. You can take one month last year, July, when they shipped something like 8,000,000 pounds of bacon. The volume of hogs necessary to make up that product was just about equal to the total of our selects and bacon grades. Now, I would like to make clear that a large percentage of these hogs are not available because they are slaughtered by non-inspected plants. I am not trying to make an alibi for the packer. There is the condition. If he had to get this product off the market—had to export—he had to take what he could get.

Q. The fact is that the packers' shipments last year hurt our market?—A. They hurt the price of our bacon. Whether the fact of their taking that amount or volume off our domestic markets helped them or not is a debatable point. They lifted a large volume of pork off the domestic market.

Q. What is the effect in your opinion of shipments by the grower to the packing plant, say, by truck?—A. Do you mean direct shipments by truck?

Q. Trucking. Let me put it another way. Do you think it would be better for the grower to ship his stuff to the market and establish a market than it



would be to keep it and miss the chance of not establishing a market?—A. Well, that is a very debatable point. Take, for instance, the province of Ontario. 45 per cent of the hogs are slaughtered outside of Toronto. Now, you can hardly expect these packers to go to Toronto to buy their hogs. I do not know the answer to that, sir.

*By Mr. Porteous:*

Q. It has nothing to do with hog grading?—A. No, it is a problem of marketing.

Mr. GARLAND: It is important.

Mr. PORTEOUS: Does the exporter have to receive a certificate before he can export?

The WITNESS: Yes.

Mr. GARLAND: I find in the west that there is a strongly developed opinion, and I think it can be substantiated, that the packers encourage direct shipments by truck in order to obviate competition that would be established as the result of the creation of a market.

The CHAIRMAN: Practically 60 per cent of the hogs go direct to the abattoirs.

Hon. Mr. WEIR: This might be of interest: the impression seems to be that direct shipments by truck are increasing very much.

Mr. GARLAND: Yes. That is what I am worried about.

Hon. Mr. WEIR: That is not altogether true. The number of selects in Toronto that are going through the stockyards is much less than usual. At one time the average was 80 per cent of the hogs sent through the stockyards, and now only 40 per cent goes that way.

The WITNESS: The percentage of hogs going direct to packing plants has not varied very much. In 1922 the percentage of direct shipments of hogs to packing plants was 57, in 1933 it was 58.8. It has not varied very much—very little in the last ten years.

Mr. SPROULE: The little packers from Kitchener and Hamilton come up by truck instead of going to Toronto to get the hogs.

The WITNESS: Yes. It is the most logical way.

Mr. SPROULE: Were it not for those little packers the farmer would not be getting the price he is; that is the only competition we have.

*By Mr. Rowe:*

Q. In western Canada the smaller packers were getting their hogs through the plants, and invariably they have been paying from 15 cents to 25 cents more for the hogs?—A. Yes. They have to pay to keep the hogs there, otherwise they would go to Toronto.

*By Mr. Garland:*

Q. With regard to the last figure you gave, does that apply to the Toronto market or to Canadian shipments generally?—A. These figures?

Q. Yes?—A. That is for all Canada.

*By the Chairman:*

Q. There is another question I would like to raise. It seems to me from what I understand of Colonel Mullins objection that the question of differentials in the lower grades of live hogs going into the market is the one to which there is most objection. I understood you to say, did I not, Mr. Pearsall, that these differentials were not arbitrarily fixed?—A. No.

Q. Does not the Joint Swine Committee arbitrate, or do they not have conferences with the packers to arrive at some arrangement?—A. Only with respect to the premiums on select hogs.

Q. And not to decide on—A. Absolutely nothing else. It is a matter between the trade. If a commission man or a drover or a farmer can sell his butcher hogs or any other grade for more money than the packer bids him that is his business.

Q. Then the condition arises that if the farmer takes a load of hogs by truck, and if there are hogs of an inferior grade on that truck, he is absolutely at the mercy of the packer as to what price he gets?—A. If he sells hogs and leaves them there he pretty nearly has to accept what the packer is bidding. There is no reason why he cannot take those inferior hogs and sell them any place else where he thinks he can get a higher price. I submitted the price differentials for the various markets on February 12. Here is your discount. Take light hogs on the Calgary market. The price was \$1 discount per hundredweight; Edmonton, \$1 per head; Moose Jaw, 45 cents per hundredweight; Prince Albert, \$1.50 per hundredweight; Saskatoon, 75 cents per hundredweight; Winnipeg, 75 cents per hundredweight; Toronto, \$1 per head; Montreal 25 cents per hundredweight; Hamilton, \$1 to \$1.50 a head. There is that difference there between a thin light hog and a finished light hog. Hamilton (A) \$1 to \$1.50; Stratford, \$1 per head; Kitchener, \$1 to \$1.50; London, \$1 and Aylmer \$1. You have a price variation from 25 cents up to \$1.50.

*By Mr. Bertrand:*

Q. With regard to Montreal you said that the price differential was 25 cents a hundredweight?—A. On this particular week.

Q. Is it not a fact that the Montreal market was paying more locally than probably some other places in Canada, and that this is why they do not want the grading to be done and that it be sold to the best advantage on the market?—A. I do not think hogs are sold to any better advantage on the Montreal market than they are on any other market.

Q. Have you a differential in the price?—A. Yes. The price differential between Montreal and Winnipeg or between Montreal and Calgary is just the difference between the freight rates and the cost of handling. The Montreal market has handled around 250,000 to 350,000 hogs passing through markets in direct competition with Toronto, Calgary or Winnipeg. They have to pay the price established at those markets plus the transportation charges. Immediately hog prices in Montreal get above that price they go to Winnipeg and buy their hogs direct and pay the freight on them.

Mr. MULLINS: Mr. Chairman, I would like to make an explanation as to the hogs from Lethbridge. This was a local order for local use in Montreal, not for packing purposes at all. They had no use for the select hogs. That is why those 84 hogs were sold out in Winnipeg. There is a better market in Montreal for small buyers for local consumption than there is in other markets such as Winnipeg and Toronto, and that is why the hog trade is better. I passed a trainload of hogs at Cobden,—a full trainload of hogs going into Montreal—and they would not have passed on down there if there had been a better market anywhere else.

*By Mr. Rowe:*

Q. Have you any information with regard to the increased per capita consumption of bacon since grading was started?—A. I have, but not here.

Q. Is it not a fact that the bacon and pork product consumption per capita has increased?—A. Yes.

Q. Is not that evidence in itself that hog grading for the local market has improved the quality and has improved the demand, because people will eat more

if they are assured of a good quality product?—A. Yes, it is. I was going to make a digression here with respect to the Montreal markets. It is rather difficult to make price comparisons because the Montreal markets are on a feed and water basis and Toronto is on a weighed-off car basis. Your bacons and butchers are sold together at Montreal, and the price is quoted on that basis. A large volume of hogs move from western Ontario to Montreal. I can submit figures to show that these are the lower grade hogs. They will send the poor hogs to Montreal and the good hogs to Toronto. On the other hand, at a point 300 miles closer to the Montreal market are hogs in eastern Ontario, around Belleville and Cobourg, good quality hogs, and the good hogs go to Toronto. Now, if Toronto did not pay more money for good hogs those hogs would go to Montreal, and yet they are directing poor hogs right past the packers in Toronto to Montreal. Now, the sum total is that Montreal pays less for good hogs under the present system than they do for poor hogs. It is a matter of balancing up. They cannot sell poor hogs for any more in Montreal than in any other market. If a packer wanted poor hogs in Montreal he would go to Winnipeg and buy butchers and lights on that market and his freight rate would be 85 cents a hundred, and he would run them direct to his plant. He does not need to get them on the Montreal market.

Q. They give the same money for butcher hogs as a bacon?—A. It balances up, making less for the bacon and more for the butcher.

Q. On the other hand the man in Toronto deducts a dollar on that hog. It is put on the rail and that is all there is to it. That man comes in and he gives as much if not more for it, and the man he buys from takes a dollar off, does he not? Take a butcher hog which will weigh say, 160 or 170 pounds; he takes a dollar off, when it is hung on the rail and a man comes in to buy it he does not take anything off it?—A. There is a small percentage of hogs in Toronto which are sold as shop hogs. They are cut up. If you cut up a butcher hog, I will admit that the loin, the hams and the rest of the cuts are just as good quality except, probably, the breakfast bacon, but it is the cut-up value that determines its value. It is not worth as much, because you get a smaller percentage of good meats to retail when you finish processing.

*By Mr. Sproule:*

Q. When I was home over the week-end I was met by many of the population in the corn belt and they wanted to know if this would interfere with them so they could not send their butcher hogs through to Montreal. They gave me to understand they were opposed to it. I think you are wrong when you give me a figure of 3 per cent?—A. I thought you referred to the hogs from western Ontario.

Q. Possibly I was wrong. But this is the point. They said they wanted to do that; that Montreal was willing to buy them and would give more money for them and they went on to say that the farmers would get a good many hundreds of dollars, if not interfered with. I can understand this. The men from the west do not understand our feed facilities because they let the hogs run with the cattle. For that reason they do not get the percentage of select hogs. They get a butcher hog and a bacon hog and they sell them in Montreal, and they have shown me the figures they have made.

Mr. ROWE: With reference to the matter of per capita consumption I think it is important that Mr. Pearsall might be permitted to put that in evidence.

The CHAIRMAN: They can be incorporated in the evidence.

Mr. BOUCHARD: I do not think you can ascribe it to the grading of hogs alone.



*By Mr. McGillis:*

Q. In all markets outside of Montreal the differentials are weighed separately?—A. No.

Q. They are weighed together in other markets?—A. You mean they are not actually weighed together, in the actual mechanics of grading; but they are sold at separate prices in other markets.

Q. Sold at separate prices; he does not have to weigh them separately?—

A. They are not weighed separately, but paid so much a head.

*By Mr. Bertrand:*

Q. They are averaged?—A. No; a dollar a head discount; if there are twenty butchers in a load, they take off \$20.

*By Mr. McGillis:*

Q. Who grades these to find out whether there are twenty butchers?—  
A. Our graders.

Q. Not in Montreal?—A. In Montreal; our graders grade the hogs.

Q. They grade the selects there?—A. They grade all the hogs.

Q. They pay for the selects?—A. They pay for the selects; we actually grade the hogs, but they may not be dealt with on a graded basis.

The CHAIRMAN: I have heard different statements on that, and I am glad to have it explained.

*By Mr. McGillis:*

Q. The shipper—the man that ships the hogs in there—is settled with for the bacons and butchers at one price?—A. At Montreal.

Q. If hogs are \$9.75 at Montreal, that is the price; and a dollar on selects?—A. Yes, that is the system at Montreal.

Q. But that does not determine the percentage of bacons and butchers that are in that load?—A. These hogs are graded regardless of the fact that they are not dealt with on that grading.

*By Mr. Gobeil:*

Q. They have a number of graders there?—A. Yes.

The CHAIRMAN: Just a minute; the reporters cannot follow this. We will have to try and ask one question at a time. All right, Mr. Gobeil.

*By Mr. Gobeil:*

Q. I would like to have a little more information on the situation in Quebec, or rather the Montreal market. I have had complaints about hog-grading. I believe in hog grading. I don't claim to be an expert, but it is an important question. You have just said that, due to the lack of legislation in Quebec the regulations were not effective there. I have received a lot of complaints from farmers in my own constituency saying that they are not able to get the dollar premium for selects. Would you tell the committee—when you say the regulations are not effective in Quebec—the situation of the farmers in Quebec due to the lack of that legislation, and that of the farmers in Ontario?—A. As I explained before, in the province of Ontario, the shipper or drover loading a load of hogs has either got to mark each farmer's hogs or else grade them. If he grades them, he has to give us the grade for each farmer's lot and his total grade for the grade lot, so that we can compare it with the final grading. If a farmer has select hogs, and he has not been paid for them and we receive a complaint, we are in a position in the province of Ontario to take legal proceedings to see that that premium is paid. In the province of Quebec we are not able to resort to any such action; if a farmer complains, we can't do anything about it.

Q. Was there any reason in your province for not passing the legislation?  
—A. Well, not specifically, to my knowledge.

*By Mr. Tummon:*

Q. Following that point up a little farther, take the farmer from Eastern Ontario that sells to the drover; that drover is shipping his purchases to the Montreal market. The drover must grade that load of hogs; he must pay his farmer for the selects in it, no matter whether he gets paid for them in the Montreal market or not?—A. He is getting paid for them on the Montreal market at the present time.

Q. Do I understand that the farmers from the twelve eastern counties of Ontario, due to the fact that the drovers are forced to grade, are getting paid more money than the farmers in Quebec?—A. Not necessarily; the sum total of money paid to the farmers in Quebec probably would be the same.

*By Mr. McGillis:*

Q. What does the drover's grade signify? What does the grade signify? It does not stand for anything, under the laws in Montreal, but the grading stands, not the drover's. I would like to know what the drover's grading signifies?—A. It just signifies this: if he grades the farmer's hogs as two selects and three bacons out of five, he is responsible to pay that farmer two dollars.

Q. But that does not stand for anything when he gets to Montreal?—A. The official grading—

Mr. TOTZKE: The drover takes the chance.

The WITNESS: He may mark the hogs if he wishes to do so; if he does not think he is competent to grade, and if he does not wish to trust his judgment on the quality of the hogs, he can mark each farmer's hogs and have them officially graded. Lots of the drovers do that.

*By Mr. Tummon:*

Q. After all is said and done, the farmer in Ontario where the regulations are in force through the result of the action taken by the provincial government, no matter whether he sends his hogs to Toronto or to Montreal, must be paid according to the grade?—A. He should be paid according to the grade.

Mr. TOTZKE: He can if he desires.

*By Mr. Tummon:*

Q. How are you going to exempt the farmer from eastern Ontario from being paid according to grade?—A. We have to accept this situation, while our regulations suggest that there is an established differential between each grade, if we conducted the prosecution of a drover for not making an adjustment on butcher hogs in eastern Ontario, if he went to the Montreal market, I am afraid that the court would uphold the fact if he presented his case this way, that "bacons and butchers sold at the same price in the Montreal market and therefore I paid my farmer on that basis; there was no differential between these grades and therefore I am settling for these hogs on the market price of these two grades on that day? I do not think we could do anything to enforce a discount on butchers in such a case.

*By the Chairman:*

Q. In other words, do I understand that if the eastern Ontario farmer markets his hogs in Montreal he can claim a one dollar premium?—A. Absolutely.

*By Mr. McGillis:*

Q. He is paid a premium on the selects. He cannot claim anything for bacons, for butchers?—A. No, not if the drover can establish—I presume the court would take this attitude that if the defendant could establish that bacons and butchers were worth the same price that day, that therefore he had paid the market price for those hogs.

Q. Whether they were the same price or not, if they were all sold together for the price they are selling there at the present time, say \$9.75, for hogs over 160 pounds?—A. Yes.

Q. You do not determine whether they are butchers and bacons or what they are; the whole thing is settled for at one price?—A. They are graded.

Q. Who grades them?—A. Our men grade them.

Q. But the man who gets settlement for the hogs gets nothing?—A. No, absolutely. I am saying that grading may not be used as the basis of settlement, but they are graded.

*By Mr. Thompson (Lanark):*

Q. Is it not necessary for the drover to give a certificate as to the grade he has placed upon these hogs when they go down to market, send in his grading to your grader?—A. On every load.

Q. I know this from selling hogs, that our drovers never grade them at all; they simply mark these hogs, and you never know what you are getting until probably the next time you go to ship. He gives you a certificate he gets from Montreal. He brings these hogs in there, and maybe there is half a dozen loads of hogs ready to be unloaded there, and he is in there writing his cheques, and paying no attention to him, but having some young fellow out there marking them, probably, in the yard. Now, these hogs are all loaded; and when they are going down to Montreal, these people sit in the smoking-car and make up their grades,—which I know,—and that grade is put in as their grade. They have not been checked. It is impossible for these men to grade these hogs. We wait, and get a certificate back the next time, and they say you have got say five or six selects, and he hands you this probably the next week or whenever you take the next load of hogs to market. That is the way it is being done. I know these men have told me that they made up their grade of the hogs by just simply looking over them and saying, "Well, I guess I have got so many selects and so many bacon" and fill this out and it will go, because afterwards they are graded again at Montreal?—A. Why are these drovers marking their hogs?

Q. They are marking their hogs so that they may know John Smith's from John Jones?—A. Therefore they do not need to grade these hogs at all. They are not grading the hogs.

Q. That is what I say; but at the same time they tell them that they have got to put in a certificate?—A. All they have got to put in is a certificate showing the farmer's name, the mark on each lot of hogs and the number of hogs.

Q. And then you get the report back?—A. I don't know what district you come from, but there were a number of shippers in eastern Ontario who were doing exactly what you describe, and we used the authority under this regulation to require them to mark their hogs. It may be that some of these drovers that you have referred to are marking their hogs because we made them mark their hogs for the protection of the farmer.

Mr. MCGILLIS: I am of the opinion that there should be a regulation that all hogs sold as bacon, when you determine bacon as the standard price of hogs,—that no other hogs should be given in that class; that simply the selects should be taken out and the premium paid on them, that these hogs in the other grades should not be weighed with the bacon hogs when bacon is mentioned as the standard price.



Mr. THOMPSON (Lanark): I don't want it to be understood that I am opposing the grading of hogs. I am in favour of it, and I am quite sure that since they have started grading hogs, we are having more attention paid to the feeding. But the great difficulty is just in what you mentioned a few minutes ago, the fluctuation in the prices. If our hogs are worth 9 cents to-day, why should they be worth 6 cents in two weeks hence, and the farmer, anticipating that the market is going to drop rushes his unfinished hogs on to the market which he would not do if we had some stability.

*By Mr. Garland (Bow River):*

Q. With respect to the variance in the differential of low grade hogs, we will remember that Mr. Pearsall said they varied from 25 cents a hundred to \$1.50 a hundred, or \$1 or \$1.50 a hog—is that due to causes that could be corrected?—A. Well, you take for instance at Kitchener where they dock \$1.50 a hog. They don't want light hogs. They don't get one per cent light hogs. It is no factor, because the packers there simply tell the farmers they don't want them, and they put this cut on that is prohibitive. If they wanted them the cut would not have been that much.

Q. Let us get a case that is not as clear as that. Suppose we take the spread in Moose Jaw and Calgary; 45 cents at Moose Jaw and \$1.50 at Calgary?—A. Yes.

Q. To what is the difference due there?—A. Probably a lot of light hogs coming into the south part of Alberta, too many light hogs. I really could not answer that question intelligently.

Hon. Mr. WEIR: It might be due to the supply of feed, and the rising market, that people wanted to get into it.

Mr. GARLAND: It seems a terribly unfair spread.

Hon. Mr. WEIR: Suppose feed were scarce in the south of Alberta there is not a demand for light hogs there. If there is a great deal of feed say at Moose Jaw and there is a rising price, the farmer would naturally want to get a light hog as near the finishing weight as he could, to make use of this feed. That same thing gave me a great deal of worry until I found that that was the solution.

*By Mr. Garland:*

Q. You have no suggestions to make in regard to correcting this?—A. Correcting which?

Q. Correcting the variance in the spread of low priced hogs?—A. Well, my personal view of that is this—I appreciate the matter of stabilizing your general price, but in the average, what encouragement should a farmer have to raise undesirable market hogs such as underweights or heavyweights or poor quality hogs? You cannot build the industry on the basis of these grades of hogs. I don't see, personally, that he is entitled to very much consideration.

Q. That is another point: we are not disputing the point that he is entitled—or rather should be victimized or under some penalty?—A. Yes.

Q. The question that I am discussing is the varying differential as between the two classes mentioned?—A. That is something I cannot answer. If you got the number on these markets, and found out what is the volume of light hogs arriving there and found out the effect it has and so forth—for instance at times in Winnipeg your light hogs will sell at the bacon price. I have known them to sell over bacon prices.

The CHAIRMAN: Would you suggest just there, Mr. Garland, that the differential for lower grade hogs should be set in the way that is adopted with selects?

Mr. GARLAND: I am not proposing to make any suggestions yet, until we find out the actual cause. If the cause were due to incorrect feeding and local conditions et cetera—well, I would not make a suggestion, but I think it is desirable, Mr. Senn, that we should reduce these spreads where it is possible legitimately to do so.

Q. I want to ask you, Mr. Pearsall, when this hog grading started; what year?—A. It was 1922; I believe it was October.

Mr. MULLINS: I am going to make this statement: That is absolutely wrong. This hog grading started thirty-five years ago. I came down to the city of Toronto with 4,000 hogs from Winnipeg. That statement comes about in this way, the salesman said to me he would pay so much for a certain type of hog; they beat me down with these 4,000 hogs I took to the city of Toronto and they taught me what singers were. Now, hog grading started there, and it was a splendid system for the man that got in amongst them. When I saw him go in amongst my 4,000 hogs—I hadn't done that when I bought them in Manitoba—and when I saw him go in there I said to my partner we had better go along home; and all we took with us was \$47—that is all we had to go home with. Hog grading started that. William Harris thirty-five years ago brought in his system and the hog business wasn't so good then. Millions have been made out of hogs from little plants. Everything is used but the squeal, it is said. And that hog grading started then; and it has been growing since and I am opposed to it. We used to build double decks in cars and go down the north shore of Lake Superior and there was nothing but trestles—and the kicking of these hogs all the way down—then unloading these 4,000 hogs at North Bay where they had no water in the yard, and letting them out in the lake for one or two miles and then having to swim out around them to get them back in, and loading them on to the cars again; I remember Sir George Bury helping me; he was superintendent at North Bay at the time. And then I came into the city of Toronto. I am not sore on the hog graders. I say you can use them, let the minister send them out into the country to teach the farmer what kind of hog to raise to suit these gentlemen, the packers. There is only one system for the farmer. If the minister wants to help the packer, let him continue hog grading in the stock yard.

*By Mr. Blair:*

Q. Could we have the figures showing the number of selects, and the percentages of the different sources since hog grading started, to see what appreciation the farmer has of the premium to improve the condition of his hogs?—A. I have submitted that. I did not give it in detail, because it was rather long.

*By Mr. Fafard:*

Q. In your remarks at the beginning you stated that the province of Quebec was much behind in the industry; if there is anything to the discussion my observation is that the farmers around Montreal receive a little less for their "bacon," and a little more for their "butcher" hogs—is that the fact?—A. In general principle, yes.

Q. Then with regard to exports you know very well that the province of Quebec, particularly around Montreal, do not grow bacon hogs, we grow butcher hogs; that is the way we want to stay. Tell us now, our market is not so bad after all. If the farmers from the west are sending their low grades to Montreal, that is their concern.

The CHAIRMAN: Dr. Pickel, you have been wanting to ask questions for quite a while.

*By Mr. Pickel:*

Q. Although we have no enabling legislation in the Province of Quebec still it is a fact that the Quebec producer gets his dollar a head on his select hogs through your grading?—A. I cannot tell you to what extent, I know that we get a lot of complaints.

Q. He is supposed to get it?

Mr. GOBEL: He is getting it.

*By Mr. Pickel:*

Q. Yes, if it is graded. The trouble in Quebec is in the administration of the act, it is in the hands of the packers. The trouble is in the enforcement of the act, as I cited in the House the other day. The case I used was that of a drover who brought in 45 hogs that he considered select himself, and he is a swine judge?—A. Were they all selects?

Q. He considered he had 45 selects. He brought them into the abattoir, and the hog grader got in amongst them with his stick and he punched them along and after a while he said, "You have got two selects." The man said, "Like hell I have." An argument developed and finally after walking up and down awhile and talking it over, the drover told the grader that he knew something about hogs, because he had been a judge of swine at most of the fairs throughout Quebec for a good many years, and he told the grader, "I know more about hogs than you will ever know." They got hot under the collar and used language that was not parliamentary, I presume, and finally after a while they cooled down and the hog grader got in amongst the hogs again and gave him 37 selects. I have got the evidence for that?—A. I wish you would give me the names; I don't believe for one minute that that ever happened. It could not happen for this reason—

Q. I can show that by evidence?—A. Listen, sir, what may have happened was this. Your packing plant may have paid him for 37 selects; but I am quite satisfied that no grader would ever deviate his grade to that extent. When he is doing his grading it has to stand up, because there are so many looking on, commission men, farmers, packers, packers' buyers, and so on.

Q. Not many farmers?—A. At Toronto and other points there are; I do not know to what extent that applies in Montreal, but the farmers' representatives—the commission men and agents—are there, and if our men haven't got the ability to stand up there and do their job and do it without fear or favour and establish a prestige for themselves, they can't stay in the game very long.

*By Mr. Sproule:*

Q. That don't mean your yard graders grade wrong?—A. I would not say so, grading is pretty accurate.

Q. I remember a load of hogs that one grader went over, and when another grader went over them afterwards I got twelve more selects?—A. Were they graded in two places?

Q. Yes?—A. How did they come to be graded in both places?

Q. Just accidentally, they weren't supposed to be there, and when they found that out they sent them over to the other place where I got a better grade?—A. You were lucky, that is all.

Q. That is exactly what happened.

*By Mr. Pickel:*

Q. Mr. Sproule was asking you about the increase per capita consumption of pork products since grading came into force; do you not think that the mere fact of the change in the mode of living among farmers who do not do their own packing any more has increased the per capita consumption? For instance,



years ago you could go into any farmer's cellar and find pork barrels packed with hams and bacon; that is all done away with and I think that is the explanation of the fact that you cannot go into a cellar to-day and find those things. Would not that account for the increase in the per capita consumption?—A. You are speaking of per capita consumption; even when these conditions existed the home slaughtering and home production was taken into consideration. Take for instance to-day, we slaughtered last year around three million some odd thousand hogs in packing plants, while the total production in Canada was somewhere around seven million, slightly over seven million. Not half of the hogs are slaughtered in packing houses and abattoirs. These conditions exist to-day.

*By Mr. Sproule:*

Q. Where do you get your actual figures from, the Department of Agriculture?—A. From the Department of Trade and Commerce, they have a census every year.

Q. From the department of Trade and Commerce?—A. Yes, the Dominion Bureau of Statistics.

*By Mr. Rowe:*

Q. Is your viewpoint borne out in the case of butter and eggs; that there has been a per capita increase?—A. Absolutely, and the reason for that is that when a man to-day buys a dozen eggs he is not afraid of getting a young chicken set down in front of him for breakfast to put him off them for a month.

Q. I think in applying the principle of grading there is no doubt that our per capita consumption of eggs has enormously increased since grading was introduced?—A. It has.

Hon. Mr. MOTHERWELL: It has doubled, and the same is true about butter.

Mr. DUPUIS: The ex-minister of Agriculture says, "The same is true of butter"; if it is true of butter I presume it is true of bacon. It is all right for the farmer who is working hard all day to eat thick fat pork, but when you come to consider urban consumption you find quality an important factor, much more bacon will be used for breakfast when you leave out the fat, heavy pork.

Mr. PICKEL: That would enter into the statistics, the amount that the farmer had in his cellar that the department would know nothing about?

Mr. SHAVER: Ten million people can only consume so much, and as you increase the consumption of beef or any product, you must decrease the consumption of some other food product.

The CHAIRMAN: Just a moment, gentlemen, please. The reference to the committee was in regard to an amendment to the regulations. So far I have heard no reference to amendments or any suggestion of amendments.

Mr. LUCAS: I would like to ask Mr. Pearsall a question: We know that Denmark has a very high reputation for bacon produced in that country. How does the system of grading there compare with the system of grading here in Canada?

The WITNESS: They have had for years a system of rail slaughter.

*By Mr. Lucas:*

Q. On the rail?—A. Yes, on the rail.

Q. Well then, would it not be a good thing to follow some of the practices over here?—A. That is why we have brought in this amendment which is attached to your regulations. We have some problems here. Our packing plants here differ entirely to those operated in Denmark. And, of course, there are other problems. Our farmers like to see the cash as soon as they see the hogs

move out of their barn-yard. Then there is the matter of moving hogs from western Canada as far as Moncton which would delay settlement probably two weeks. These are conditions that are entirely different from what they have in Denmark, but nevertheless we have places in Canada, such as in central Ontario where they believe in a rail graded system and we want to go ahead and try to work it out. Then there is the question of weighing the carcasses. The speed of operation in Denmark is very slow. Here they slaughter as many as 650 an hour which is about one every  $5\frac{1}{2}$  seconds and, of course, there is the problem then of weighing those carcasses accurately. These are some of the things we have got to work out, and that is why we have taken this step to go ahead and try and see if we cannot do it on that basis, because we believe it is a better method.

Q. Is not all the Denmark product handled by the co-operative method?—

A. Not all; the larger proportion is.

Mr. MULLINS: Who should be the better judge in Canada, Mr. Chairman, as to whether hog grading is satisfactory to the farmer or not, who ought to know?

The WITNESS: The farmer himself.

*By Mr. Mullins:*

Q. The farmer himself?—A. Yes.

Q. The man who is handling in the stock yards, handling all the hogs that go into the stockyards, should not he be somewhat of a judge?—A. He is only the farmer's agent.

Q. Would he know whether it was advantageous to the farmer or not in building up a trade, as to whether it was in the interest of the packer or the farmer? For your information, 99 per cent of them have come to me and asked me to get rid of this system of hog grading in the yards.—A. I would expect that.

Mr. MULLINS: I do not want you to think, Mr. Chairman, that I am altogether against the hog grading men that are in the yards, but it is the system, and 99 per cent of the sale-men that are in business in the yards say—although they are afraid to say it openly; they are afraid to say it to the minister, but they have told me so—

The CHAIRMAN: I would suggest, Col. Mullins, in a case of that kind the wisest thing for this committee to do is to call some of these men here.

Mr. MULLINS: You cannot do that here. They are handling other products; they have other stuff to sell and they won't say it. There was a delegation waiting on the minister here from Montreal just a week ago, and one of them said to me, "Why don't you get rid of this iniquitous system, it is against the farmer's interest." They would not go and tell it to the minister, they are afraid to say it in case they get into trouble in the yard.

Mr. ROWE: What does the Swine Breeders' Association say about it?

Mr. SPROULE: They do not grade hogs.

Mr. ROWE: You are in the corn belt.

Mr. SPROULE: I can get the names on a petition, I have a desk full of them.

Mr. ROWE: As far as the Swine Breeders are concerned what do they tell you?

The CHAIRMAN: I would suggest, gentlemen, that we should have some sworn testimony before this committee to that effect otherwise we are labouring in the dark. And I would also suggest to the committee that commission men, or somebody in the position to talk about this should be called.

MR. GARLAND: I think so, Mr. Chairman, especially if these commission men are not the altruistic angels that Mr. Mullins would believe. I am suggesting the commission men have one eye on the packer and half of the other eye on the drawer and that they have to keep in with both parties.

MR. MULLINS: I think you are right there.

THE CHAIRMAN: What I am trying to get at is this, we are just labouring in the dark, we are getting nowhere, and will continue to get nowhere unless we have some constructive suggestions.

MR. TUMMON: Mr. Chairman, Mr. Lucas raised a question a moment ago along the lines of a question I was going to ask. I am anxious to know just how far the department had gone in an endeavour perhaps to start grading on the rail. It has often occurred to me—and I think it is a question that this committee could very easily consider—as to whether or not the one dollar spread for selects is sufficient. And perhaps it might be considered to add bacons in there and make a spread. Those are the two grades that we really want to develop, and I doubt very much if one dollar per hog is sufficient to-day to encourage the producer to feed as he would feed to produce either selects or bacons. I think that is a matter for the committee to consider. Perhaps the spread could vary according as the general price of hogs varies. Another point that has occurred to me in connection with grading on the rail which I have sometimes thought might be worked out: All the hogs in our district are purchased from the producer by the drover. It seems to me that some arrangement might possibly be made, or this committee might consider it, for paying the producers when they bring their hogs in, a certain price. You mentioned 80 per cent. I would be inclined to go even higher than that. When they are taken into the packing house and graded there on the rail, I presume you mean that the extra remuneration that has to go back to the producer will go back through the drover. I believe it would probably be of greater advantage to the producer if some arrangement could be made whereby all that which would go back to the producer did not go through the drover at all but would come say either direct from the packing house to the producer, or perhaps some other arrangement could be made. No doubt it would mean considerable work but you would eliminate all possibility of that money not getting back to the producer through the drover. I believe that is something that should be considered by this committee.

*By Mr. Sproule:*

Q. The price on selects was \$2 was it not?—A. At that time we had a different set of grades. We had selects and thick smooth grades.

Q. But the select hog was \$2?—A. Yes.

THE CHAIRMAN: Gentlemen, we have only about five minutes left and I do not think we can carry this discussion any further to-day. The committee should decide what they are going to do. Do you want a representative of the packers in or a representative of the commission men or a representative of the producers?

MR. MULLINS: Yes, Mr. Todd for one.

MR. ROWE: What do you want him for, Mr. Chairman?

THE CHAIRMAN: I am not suggesting that you should have him.

MR. TUMMON: Mr. Chairman, I think we could advantageously talk this matter over amongst ourselves before bringing any more witnesses here.

MR. ROWE: I think, Mr. Chairman, you have one of the best authorities on swine in Canada with you to-day in Mr. Pearsall.

THE CHAIRMAN: There is no doubt about that.



Mr. ROWE: And I do not see that there would be any purpose to be gained by bringing anybody here at this stage.

Mr. LUCAS: Mr. Chairman, I was asking Mr. Pearsall a short time ago about the system practised in Denmark. Perhaps Mr. Pearsall also has knowledge as to the system practised in other countries. If you will read the reports that are contained in the agricultural report that comes to us monthly, you will notice there that our bacon is I think the lowest priced bacon going into the British market of any of those countries that are shipping there, and, therefore, one would draw the conclusion that our grading or our system of handling this bacon is not up to the same standard of those other countries. We are endeavouring to improve ours, and if we could find out what system those other countries is practising we might be able to learn a lesson from what they are doing and be able to operate something along their line and thereby raise the class of our bacon.

Hon. Mr. WEIR: There are two points that should be brought to the attention of the committee before we close to-day. It has been suggested that the commission men are 99 per cent against this bacon grading. I met the commission men. They were present from Montreal, Toronto and the West. We had a very frank discussion. It was understood that there would be no statement made with reference to it if that was their wish. I asked this question: Over a period of a year do you think that you could get more money for the farmers if there was no grading, taking the whole bulk of hogs, than if there is grading, and the majority of them, in fact all but two, asked to have the grading continued. As I say, our discussion was very frank and, like Mr. Garland, I told them that there was serious doubt in my own mind as to whether they were purchasers for the packers or salesmen for the packers. My other suggestion is that I think, sitting here as a listener, the majority of the committee would be very glad to hear more in detail from Mr. Pearsall at another meeting of the effort that has been made to get to the stage where we can have rail grading. It is a slow process, and I know that you people are in the same position that I myself was in. I was impatient and I thought we should have it right away; but I discussed it at length with Mr. Pearsall, and when he told me of the work that had been done I thought possibly it might be well for you to get a more detailed account of the steps that have been taken for the last three years at least.

The CHAIRMAN: Is that agreeable to the committee, that we meet again and have Mr. Pearsall back?

Agreed.

Mr. SPROULE: The suggestion has been made that some of the remarks as to grading ought to be substantiated. I can get a petition from my part of the country at least and send it in here, if that is going to be any good; I can have that done.

The committee adjourned at 1 p.m. to meet at the call of the Chair.

## APPENDIX A

## PRODUCTION AND QUALITY OF HOGS BY PROVINCES 1923-1933

Province	Year	Total hogs	Sel	Bac.	But.	Thick Smooth	Heavies and Extra Heavy	Sows	Lights, Feeders
Alberta.....	1923	406,380	2.43			72.74	3.12	13.32	4.24
	1924	632,073	2.7			75.2	4.6	7.5	3.5
	1925	646,452	3.4			67.3	2.2	14.5	3.8
	1926	604,127	5.3			71.8	3.7	4.8	8.2
	1927	544,321	5.7			70.6	4.2	3.8	7.1
	1928	586,070	6.4			68.7	6.1	8.6	3.6
	1929	681,554							
	1930	628,935	6.0	21.0	58.1		2.7		8.9
	1931	723,352	7.1	27.2	54.9		3.2		5.3
	1932	1,008,452	8.4	31.7	45.0		3.2		8.7
1933	1,032,169	7.9	32.5	45.0		2.6		8.5	
Saskatchewan.....	1923	199,219	4.8			63.5	10.0	6.8	8.2
	1924	360,858	3.1			56.3	7.5	18.1	5.8
	1925	342,613	4.2			53.8	5.2	24.6	6.2
	1926	278,449	5.7			59.7	9.5	6.1	10.6
	1927	282,633	6.5			61.0	7.9	6.8	12.0
	1928	285,644	6.4			55.6	7.4	12.0	12.1
	1929	337,649							
	1930	314,579	5.1	17.0	47.8		5.0		19.2
	1931	398,850	8.3	27.5	33.4		6.3		18.2
	1932	491,207	9.5	29.5	33.4		5.7		18.0
1933	490,299	11.8	32.9	28.2		5.1		17.5	
Manitoba.....	1923	123,090	7.9			61.1	9.0	7.3	9.0
	1924	215,995	5.5			57.0	4.8	21.1	5.4
	1925	259,507	7.4			58.5	5.4	20.5	3.7
	1926	223,774	10.3			59.1	8.1	7.7	8.9
	1927	271,900	13.6			55.9	6.1	7.6	11.4
	1928	242,503	14.1			51.2	4.6	13.7	11.6
	1929	222,171							
	1930	200,131	14.4	26.5	35.6		5.3		13.8
	1931	268,710	15.7	35.8	21.8		5.4		16.2
	1932	281,402	14.6	39.1	16.7		3.5		22.7
1933	244,377	17.2	41.3	14.6		4.5		18.2	
Ontario.....	1923	1,508,455	21.1			55.2	6.3	12.6	2.5
	1924	1,771,945	22.4			55.9	3.8	11.4	3.5
	1925	1,488,573	24.3			59.8	4.1	6.7	1.9
	1926	1,467,120	23.0			57.9	5.6	6.4	1.5
	1927	1,642,181	24.7			59.7	4.5	7.2	1.9
	1928	1,518,618	24.5			60.9	2.6	7.6	1.7
	1929	1,306,531							
	1930	1,053,880	24.7	55.5	14.1		2.9		3.4
	1931	1,121,162	23.2	53.0	16.8		2.4		3.2
	1932	1,325,537	22.6	53.7	15.5		1.4		5.2
1933	1,356,939	24.2	53.7	13.3		1.2		5.4	
Quebec.....	1923	91,986	10.9			39.0	5.9	37.5	3.2
	1924	113,420	9.8			42.6	4.4	35.8	3.7
	1925	77,511	12.1			49.5	6.2	27.1	2.6
	1926	117,411	6.8			52.0	4.5	27.6	5.0
	1927	140,935	7.1			57.3	5.4	25.0	3.3
	1928	112,700	8.1			47.2	5.9	29.4	4.5
	1929	71,323							
	1930	82,827	9.5	28.8	31.1		5.3		22.0
	1931	111,917	6.5	24.6	37.4		5.5		24.0
	1932	74,457	7.1	25.4	37.7		3.5		23.3
1933	65,768	9.3	29.6	38.6		3.8		16.3	

## APPENDIX B

SCHEDULE OF PRICE DIFFERENTIALS BETWEEN VARIOUS GRADES OF HOGS,  
EFFECTIVE FEBRUARY 12, 1934

Market	Premium on Selects	Discount on Butchers	Discount on Heavies	Discount on Extra Heavies	Discount on L. & F.
Calgary.....	\$1.00	\$0.50 cwt.	\$1.25 cwt.	\$2.00 cwt.	\$1.00 cwt.
Edmonton.....	\$1.00	\$0.50 cwt.	\$1.25 cwt.	\$2.00 cwt.	\$1.00
Moose Jaw.....	\$1.00	\$0.50 cwt.	\$0.75 cwt.	\$1.00 cwt.	\$0.45 cwt.
Prince Albert.....	\$1.00	\$1.00	\$0.50 cwt.	\$1.00 cwt.	\$1.50 cwt.
Saskatoon.....	\$1.00	\$0.50 cwt.	\$0.50 cwt.	\$1.75 cwt.	\$0.75 cwt.
Winnipeg.....	\$1.00	\$0.50 cwt.	\$0.50 cwt.	\$1.85 cwt.	\$0.75 cwt.
Toronto.....	\$1.00	\$1.00	\$1.50	\$1.50 cwt.	\$1.00
Montreal.....	\$1.00		\$0.50 cwt.	\$1.00 cwt.	\$0.25 cwt.
Hamilton (A).....	\$1.00	\$1.00	\$1.00	30% less	\$1.00-\$1.50
(B).....	\$1.00	\$1.00	\$2.00	\$1.50 cwt.	\$1.00-\$1.50
Stratford.....	\$1.00	\$1.00	\$1.00	\$1.50	\$1.00
Kitchener.....	\$1.00	\$1.00	\$1.00	\$1.00-\$1.50 cwt.	\$1.00-\$1.50
London.....	\$1.00	\$1.00	\$1.50	\$1.50 cwt.	\$1.00
Aylmer.....	\$1.00	\$1.00	\$1.00	\$1.50 cwt.	\$1.00

In cases where cwt. is not indicated, the discount is on a per head basis.







THE SENATE OF CANADA



PROCEEDINGS

OF THE

STANDING COMMITTEE

ON

AGRICULTURE AND FORESTRY

*Re—Conditions of Agriculture Generally*

No. 1

The Honourable J. J. Donnelly, Chairman

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WITNESSES:

Dr. G. S. H. Barton, Deputy Minister of Agriculture, Ottawa, Ontario.

Mr. F. E. M. Robinson, Dairy Farmer, Upper Melbourne, Quebec.

OTTAWA

J. O. PATENAUDE

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1934



STANDING COMMITTEE ON AGRICULTURE AND FORESTRY

The Honourable J. J. DONNELLY, *Chairman.*

The Honourable Senators:

Bénard,	Gillis,	Raymond,
Black,	Horner,	Riley,
Buchanan,	Little,	Sharpe,
Burns,	McGuire,	Sinclair,
Donnelly,	Pope,	Smith.

## MINUTES OF EVIDENCE

THE SENATE,

WEDNESDAY, March 14, 1934.

The Standing Committee on Agriculture and Forestry met this day, in room 258, at 10.30 a.m.

Hon. Mr. Donnelly in the Chair.

The CHAIRMAN: Gentlemen, acting on your suggestion, after our last meeting, I interviewed the Deputy Minister of Agriculture, Dr. Barton, and he kindly arranged to attend here this day. I intimated to him that, judging by our discussion in committee, he would be expected to give us some information with regard to the restrictions to be placed on the number of cattle that may be exported to Great Britain; also information dealing with the wheat quota, and any other subjects that we may decide to investigate. No doubt members of the Committee will have questions to ask on various subjects. Is it the wish of the Committee that we now hear Dr. Barton?

Some Hon. MEMBERS: Yes.

The CHAIRMAN: We will leave it to you to begin in any way you prefer, Dr. Barton.

Dr. G. S. H. BARTON: Mr. Chairman, the first subject that you had on your memorandum was the disposal of the wheat surplus. Now, the problem there is one that I suppose no one can answer. Perhaps I should remind you that the Department of Agriculture does not deal with the actual marketing of wheat. It is considered, of course, in connection with the production of wheat and its uses in this country, particularly with reference to feeding. I think that copies of this pamphlet which I have here (referring to pamphlet entitled "The Agricultural Situation") have been sent to you.

Hon. Mr. RILEY: Yes.

Dr. BARTON: I would direct your attention to the statement there, which while brief is, I think, a very good summary of the wheat situation. The surplus in 1933 was 700 million bushels, for the four countries, of which Canada had 211.7 million bushels. This surplus was accounted for, of course, by the increase in production in all the important countries, including Europe. The statement is set out here in detail, and shows the requirements of this country to be 118 million bushels. There has been some revision of these figures since this statement was compiled, because the situation of course changes. Instead of 118 million bushels, the consumption in Canada last year was 107,676,155 bushels. Of this amount the human consumption was 43,095,155 bushels; seed, 32,277,000 bushels; feed—and this is, I think, an important item—22,996,000 bushels; and a couple of smaller items, loss in cleaning, and unmerchantable, making up the 107 million bushels.

As far as the prospect for this year is concerned, of course, we have a number of factors, including the big one of last year, drought, and one with which I am going to deal particularly, the second on your program, loss through grasshoppers. Also there is the possibility of some curtailment in production that may result from measures taken for control through seeding practice and so on.

Hon. Mr. SHARPE: Control of what?

Dr. BARTON: Control measures through culture, seeding and so on, that will probably restrict the actual crop seeded this year.

I have one thought in mind in regard to the wheat situation, which I pass out to you. It is to some extent closely related, I suppose, to the use that is made of wheat for feeding. I think that if the reserve of wheat were distributed more widely than it is among the farmers themselves, there would probably be some likelihood, and certainly more opportunity, of it being used for feed than when it is concentrated in large quantities at central points.

I am not a Western man, so my contact with Western conditions is limited. I spent two months there last summer, and visited the West on different occasions previous to that. I have made a number of contacts, personally and officially, and I have been struck, particularly this year, by the fact that people who have little or no crop have no reserve of any kind. Now, if not only wheat, but other grains were carried in some reserve on these farms, as is the practice to some extent in the East—and as you know, probably better than I do, it was the regular practice in olden times on our farms to carry a reserve of corn and grain, sometimes far in excess of the requirements for a single year—there would be a security, and it would allow of a flexibility that is not possible where people work on a year to year basis.

Hon. Mr. SHARPE: I read in the daily paper that cattle are dying around Brockville for want of feed and that the farmers cannot afford to buy it.

Dr. BARTON: There may be some extreme cases, but I would not suppose the condition was general.

Hon. Mr. SHARPE: What did you say was the amount of the crop last year?

Dr. BARTON: Our total crop last year was 269·7 million bushels; the carry-over was 207·11 million bushels.

Hon. Mr. SHARPE: Can you give us any idea how much of that crop of last year consisted of grade 3 wheat or better?

Dr. BARTON: I cannot give you the proportion of the grades.

Hon. Mr. SHARPE: What I had in mind was this. The No. 3 and better is what we call our contract wheat.

Dr. BARTON: Yes.

Hon. Mr. SHARPE: If some scheme could be worked out whereby everything lower than that grade could be used for feed, that wheat could be put into cattle and hogs and used to fill our quota of cattle and hogs to Great Britain. Then we would not have much more than the quota of wheat that we can send to Britain. We could turn the low grades into cattle and hogs and ship them over. Have you done anything along that line?

Dr. BARTON: I have not made any calculation as to the proportions, but I suppose it is to be expected that that is the type that is going into feed.

Hon. Mr. SHARPE: Have you done anything towards encouraging the farmer in that direction, and to bring up the quota of cattle and hogs?

Dr. BARTON: We are attempting that, I suppose one might say, from two angles, one being the improvement of the grade of wheat, and the other, of course, the encouragement to feed low grade wheat and the dissemination of information as to its value and the uses that can be made of it. Much work has been done and is being done in this direction.

Hon. Mr. RILEY: In the section of the country that I come from there was very little wheat below No. 3. Most of it was No. 1 and No. 2. Of course we had a very light crop by reason of the drought.

Dr. BARTON: Yes.

Hon. Mr. RILEY: And on top of the drought we had a severe frost which destroyed thousands of acres of wheat when it was in the blossom, and shortly



after it commenced to form. But in that district for several years there has been, particularly since the price of wheat dropped, a great deal fed to stock—cattle, sheep and hogs—and people who have used wheat claim that there is more feeding value in it than there is in oats and barley mixed.

Hon. Mr. SHARPE: Isn't wheat too strong for hogs?

Dr. BARTON: It has got to be fed in mixture to all classes of stock, but there is no question about the feeding value of wheat.

Hon. Mr. RILEY: Sheep do exceptionally well on wheat.

Hon. Mr. POPE: At present prices wheat that is fed to hogs is more valuable than it is in any other form.

Hon. Mr. SHARPE: The low grade wheats are just as good for feed purposes as the others.

Dr. BARTON: Yes, provided they are not damaged.

The CHAIRMAN: The quantity of wheat that can be used for feeding purposes depends on the price of coarse grains. At present prices wheat would be much cheaper than oats.

Hon. Mr. RILEY: What steps do you propose to take to reduce the quota of wheat?

Dr. BARTON: You mean the restriction of production?

Hon. Mr. RILEY: Yes.

Dr. BARTON: I am not in a position to say anything definite in regard to that.

Hon. Mr. SHARPE: No person knows anything about it yet.

Hon. Mr. HORNER: You have just been telling us of the lack of any reserve in western Canada. That certainly has been a big mistake. We were led into that practice by the elevator companies which encouraged farmers to put their wheat where it could be marketed at once and shipped to the head of the lakes. Some of it had to be shipped back. Had the policy of keeping a reserve been adopted the farmer would have been in a much better position in a year of crop failure.

Dr. BARTON: Yes.

Hon. Mr. HORNER: Some men are fattening cattle on nothing but wheat, so far as grain feed is concerned, and they are doing fine.

Hon. Mr. BURNS: There cannot be anything better than wheat and barley for cattle. Of course, you have to be careful to start them off easy. Wheat is also very good for sheep.

Hon. Mr. POPE: I fed a lot of hogs practically on all-wheat. When I sent them to a man by the name of Pat Burns, who lives down in a little town called Calgary, he asked, "Whose hogs are these?" He was told, "Pope's". He said, "It is the best carload ever shipped in here. I will give him a dollar a head more on the market."

Hon. Mr. BURNS: Wheat fed hogs give the sweetest pork. In our country we use all wheat and barley for cattle. Good clean screenings are just as satisfactory.

Hon. Mr. BUCHANAN: Can you tell us how much of the wheat surplus is high and how much low grade?

Dr. BARTON: There is a record of that, but, as I say, we have not very much to do with the details, so I have not the figures at hand. They are available.

Hon. Mr. SHARPE: In the Department of Trade and Commerce.

Dr. BARTON: Yes.

Hon. Mr. HORNER: The majority of the farmers in the West are opposed to acreage restriction, for the reason that when the acreage was restricted it might be a good season, and next year there might be a comparative crop failure. We see no harm in asking a man to keep his grain in his barn. Allow him to grow what he wishes, but restrict his delivery. As the grain accumulated on the farm some people think it would depress the world's price, but I do not think it would, because it is the grower's own business if he stores his grain for some time. For the first year the standing crop might be estimated, but as the years went by it would be difficult to tell what surplus remained in the granaries. I think the farmer should adopt the same practice as other men in business, and if anyone asked how much grain he had in his granary, tell him that that is his particular business.

Dr. BARTON: I think that is a common practice in France. It is very difficult there to tell what the so-called invisible supply of wheat is.

Hon. Mr. HORNER: It is the case of the farmer attending to his own business. Everybody has been estimating the wheat crop, and several times it has been estimated at several million bushels more than the actual yield.

Hon. Mr. RILEY: I think it would be a great mistake to make the restriction on acreage compulsory. It would not work out in practice.

Dr. BARTON: It would be extremely difficult to work out.

Hon. Mr. RILEY: As crops vary from year to year it would be impossible to form an accurate estimate of the yield, for in the western country we have so much to contend with in raising our wheat. For example, last year my yield on 40 acres of wheat was five bushels an acre; the year before it was 19 bushels. On the first of June there was promise of a better crop than the year before when, as I say, the yield was 19 bushels to the acre. If you restrict the number of bushels to be marketed, then a farmer could raise as much wheat as he wanted, and his surplus he could feed to his stock. A farmer can always get stock from the ranchers on an agreement basis if he has the feed. It has been demonstrated that there is no better feed for cattle than wheat. Of course, it might need some other grain mixed with it.

Dr. BARTON: Wheat is good feed for all classes of live stock.

Hon. Mr. RILEY: I think the restriction should be on the bushels of wheat marketed.

Hon. Mr. SINCLAIR: Has Dr. Barton prepared a statement on the cattle quota?

Dr. BARTON: I have a statement on cattle, but perhaps I may be allowed to take the grasshopper statement next, as it bears on the wheat situation.

I have a memorandum here. The present grasshopper outbreak, as you know, involves all of the three provinces. It began to be felt in each of the western provinces in 1930, although our service had been watching for it to begin from 1929. It reached serious proportions first in Manitoba in 1931. The areas involved in the outbreak expected in 1934 are as follows: Manitoba, 9,507,000 acres; Saskatchewan, 28,112,000 acres; Alberta, 22,785,000 acres.

Hon. Mr. BUCHANAN: Does that cover the southern part of each province?

Dr. BARTON: I have a map which I will pass around so you can see where the infestation is. There is some infestation in the whole area, but the very severe infestation includes 21,843,000 acres; in what we class as severe, 26,541,000 acres; in what we class as light, 22,030,000 acres. The total area of cropped land requiring organized control is estimated to be 20,255,000 acres. As I say, the degree of infestation varies. Eggs have been found present in fields to the number of 140,000 per square foot, the more usual number being from 50 to 200 per square foot. Severe infestation is where eggs run from 15 to 30 per square foot, and very severe is over 30 eggs per square foot.

In terms of loss, the average loss by provinces, including all crops attacked by grasshoppers, which is to be expected in 1934 if no control were undertaken, may be estimated approximately as follows: Manitoba, 25 per cent; Saskatchewan, 60 per cent; Alberta, 40 per cent. With the control campaigns projected for the year we expect to reduce this loss to well below 10 per cent.

Hon. Mr. RILEY: Is that 40 per cent of the entire acreage?

Dr. BARTON: Of the crop.

The CHAIRMAN: Of the total crops of the provinces or only of the infested areas?

Dr. BARTON: The total crops of the provinces.

Hon. Mr. BURNS: That would be 40 per cent?

Dr. BARTON: On the basis of acreage.

Hon. Mr. BUCHANAN: You mean it is the area infested by grasshoppers?

Dr. BARTON: This year, if no control measure were taken at all, that is the estimated loss which might accrue. But with control measures it is hoped to reduce this loss well below 10 per cent. That is problematical, of course.

Hon. Mr. BURNS: How would the grasshopper situation affect the cattle and sheep?

Dr. BARTON: That includes all crops, of course,—not only wheat but other grains, and pasture.

Now, with regard to organization, all three provinces are well organized this year. For example, Saskatchewan is thoroughly organized for a complete campaign. There are on hand there 180,000 gallons of sodium arsenite, that is 100 tank cars of it; 900 cars of bran, and 1,200 cars of sawdust; and it was reported that by the 1st of March, 1,200 local committees had been formed.

Now we come to the method of control. The cultural practices essential to control in a large scale outbreak like the present one are as follows:

(a) Early seeding. That is to advance the growth as far as possible before the attack begins.

(b) Seeding fallow land or stubble only after ploughing. The bulk of the eggs are laid in stubble land. The object of the ploughing is to bury the eggs and to kill the young hoppers hatching from them.

(c) Ploughing guard strips around stubble to be fallowed. This is to provide a place upon which to poison the hoppers coming from the old stubble.

(d) Ploughing stubble, in summer fallowing, in strips and poisoning the grasshoppers on the strips. This crowds the grasshoppers on to the unploughed part, where they should be poisoned.

(e) Killing eggs in infested land by very early and very shallow cultivation, that is by exposing the eggs to sun and wind, which kills them.

Now, if these cultural practices are followed, as it is expected they will be in large measure, they should have some effect in restricting the area of land that will be cropped.

The backbone of the control, however, which is essential upon every threatened acre is the poisoning of the grasshoppers in the young stages, with poisoned bran bait made up of the following ingredients: 50 pounds of bran 50 pounds of sawdust, one quart of sodium arsenite, and ten to twelve gallons of water. This is to be scattered broadcast by hand wherever the hoppers are present in numbers, preferably in the early part of the day when the sun is shining and when the temperature is not below 68 degrees fahrenheit and not above 85 degrees fahrenheit, these being the temperatures between which the grasshoppers feed. The application and the distribution of the bait really determines the use that the grasshoppers will make of it. A lot of mistakes have been made where organization was not as thorough as it should have been in that regard, and consequently there has been much wastage and lack of results.



Hon. Mr. BUCHANAN: Are there any weather conditions that might arise and help to destroy the grasshoppers?

Dr. BARTON: Yes. I shall be coming to that shortly, sir. First may I refer to the estimated cost of control for 1934? It is as follows: Manitoba, \$95,000; Saskatchewan, \$500,000 and Alberta, \$125,000, a total of \$720,000. That looks like a lot of money. But at a conference held in the United States, attended by Canadian representatives, a recommendation was made that the sum of \$2,000,000 be requested for coping with the grasshopper situation in the United States. So far as I can learn their territory is no more extensive than ours, if it is as extensive, but we feel that we are perhaps a little better organized than they and therefore can do the work for relatively less money.

The CHAIRMAN: Who bears the cost of the control?

Dr. BARTON: The province pays for the bait, and the municipalities arrange for the mixing of the bait. The federal service, through the Entomological Branch and also through the Experimental Farm Branch, provides a staff for organizing, directing, and working with the provincial people. The cost of the campaign in 1933 was \$95,000, of which sum \$60,000 was paid by the province and \$35,000 by the municipalities. The estimated savings were 31,800,000 bushels of all grains, with an estimated value of \$15,944,750.

Answering the question of Senator Buchanan, I will now refer to the relation between the weather and grasshopper outbreaks. These outbreaks usually take place after a series of dry, warm years. The interplay is about like this. A warm season is usually a dry one. The warm season allows the eggs to hatch early and the young hoppers to develop very rapidly and reach maturity early in July. As a great proportion of the grasshoppers live till the first frosts, the early maturity gives a prolonged period for egg laying. As a consequence, the grasshoppers are enabled in a warm dry summer to lay several times as many eggs as in a year when the weather is cool and the periods of activity are curtailed by cloudy or rainy weather. In addition, the fact should be recognized that moist weather is favourable to the development of fungus diseases of grasshoppers which may, if conditions are suitable for their development, completely sweep off the grasshopper population upon very large areas, hundreds of square miles.

Grasshoppers are normally held in check by natural conditions. In the ordinary year the interplay of warm and cool weather, sunshine and rain, disease, parasites and predators prevents them from becoming abundant enough to injure crops seriously. However, a dry warm year or two allows the grasshoppers to increase rapidly and out-strip the various factors tending to keep them down, and if the dry period continues as during the last five years, a prolonged destructive wide spread outbreak results.

As a rule the outbreaks would eventually be terminated by nature. Some times it is simply weather, the dry warm years being followed by a cool year or two. On other occasions it has been a warm but moist year which has so promoted fungus diseases that the grasshoppers are virtually brought to an end. In others, where the weather was more or less normal and not definitely promoting grasshopper increase, the natural insect parasites normally present and attacking the grasshoppers simply increased to a point where they reduced the grasshoppers to a status below outbreak numbers. As a rule all factors operate together to some extent, and eventually bring about a reduction of numbers below the point of economic importance. This process, however, may take one, two or three years, and meanwhile several crops may be ruined. Hence the necessity of protecting the crop by what look like expensive campaigns. The protection of the crop is so easily possible and the benefits of control effort so direct and profitable that popular support for the work in any locality where an outbreak is threatened or in existence is virtually unanimous.

Grasshopper eggs are very resistant to cold and other weather conditions, and once the eggs are laid there is every assurance of a very large proportion of them hatching.

Drenching rains when grasshoppers are small often drown very large numbers of them; but this is of such rare occurrence and takes place upon so restricted an area that it holds out no material hope of seriously reducing the menace to the crop in the West in 1934.

There is virtually no hope of natural control factors materially reducing the number of grasshoppers in 1934 before the crop is ready to harvest, and before the full damage for the season has been effected.

Hon. Mr. SHARPE: A cold, wet spring would not do us much good, then?

Dr. BARTON: It would delay hatching.

Hon. Mr. BURNS: If it happened to be a very wet season it would kill them off, wouldn't it?

Dr. BARTON: If, coupled with that, you had warm enough weather to promote fungus growth.

Hon. Mr. HORNER: What about the grasshoppers that are hatching out in the middle of February? Would they survive?

Dr. BARTON: There are some, I believe, but they are not of much consequence.

Hon. Mr. HORNER: They would not survive to do any damage next summer.

Dr. BARTON: Not with the weather we have had here.

Hon. Mr. HORNER: You can freeze them and they come to life.

Hon. Mr. McGUIRE: What effect has the distribution of poison on bird life? Has it any?

Dr. BARTON: Not so far as I know.

Hon. Mr. McGUIRE: That means that they do not eat it?

Dr. BARTON: It would depend to some extent, I suppose, on how it is distributed. It should be distributed very lightly.

Hon. Mr. RILEY: A good many years ago we had a plague of grasshoppers in the High River district. They destroyed pretty nearly all the crop except the wheat. There was nothing left of the wheat except the naked stalk and the head, but the quality of the wheat, and possibly the yield did not seem to be injured. All the other crops were eaten up, even the wild hay. There was nothing left but the big coarse stem. That year the farmers poisoned, and the next year there were no grasshoppers. It was a wet season, and they all disappeared. We had had them for two years, and the second year they were very bad. We first used bran, which was supplied by the Government at mixing stations scattered all around. Those stations could not mix the bait as fast as it was needed, so the farmers mixed it themselves. Then the bran played out, and we used sawdust, and we found it just as effective as bran. We bought molasses by the barrel, and put it with water, and sweetened the sawdust with the solution.

Dr. BARTON: They used to use other materials, such as lemon, too; but as a result of investigation they found they were not necessary.

Hon. Mr. BURNS: I think it was probably the same year that we had grasshoppers, and we used to say they ate the grass at night and came out to eat the grain in the day. We used to put straw around the side of the grass, and mix it with poisoned bran, and in the evening when the grasshoppers would go in there we would set fire to the straw.

Dr. BARTON: I will show you the maps you asked for of the territories affected.

Hon. Mr. HORNER: With your lower area do you think you can control the grasshoppers? I think they will clean the crop anyway.

Dr. BARTON: It will be a hard battle, but we think we can save a large proportion of the crop.

Now, the darker shading on this map, with the checking, shows the severe area. This is a map of the three provinces. You will notice that there is a big area in Saskatchewan.

Hon. Mr. RILEY: That is the southern part.

Dr. BARTON: Yes. There is Alberta, which conducted a very good campaign last year, and here is Manitoba which has narrowed the very severe area very considerably.

Hon. Mr. SHARPE: Will the grasshoppers migrate from one province to another?

Dr. BARTON: Yes. There is a migrating type of grasshopper which is very difficult to deal with.

Now, here is a map of Saskatchewan. The dark red shows the area.

Hon. Mr. RILEY: Are these townships that are shown?

Dr. BARTON: Yes. Here is Manitoba.

Hon. Mr. RILEY: Where is the Alberta map?

Dr. BARTON: Alberta is shown in the large map. We haven't got a separate map of Alberta.

Hon. Mr. BUCHANAN: I read somewhere that the type of grasshopper this year was different. I think it was in Montana.

Dr. BARTON: We have three bad types.

Hon. Mr. BUCHANAN: Is the worst type more in evidence this year than it has been at other times?

Dr. BARTON: I would not say that. The three types are all numerous. There are many more types than these.

Hon. Mr. RILEY: You have the flying type?

Dr. BARTON: Yes, that is one of the three. I saw them in clouds in Saskatchewan.

Hon. Mr. RILEY: We didn't have any of them in our country.

Hon. Mr. SHARPE: We had them in Manitoba.

Hon. Mr. BUCHANAN: The grasshoppers that are in evidence in mild weather were very much in evidence in Alberta. When were they hatched?

Hon. Mr. RILEY: Were they really grasshoppers?

Hon. Mr. BUCHANAN: Oh, yes. We took them over to the government official, but he said they were not related to the eggs deposited last fall.

Hon. Mr. McGUIRE: Apart from destruction of grasshoppers, do you know of any insects that are parasites on them?

Dr. BARTON: Yes, there are parasites. Some have been distributed in the West. There is some evidence of progress in this direction in Alberta.

Hon. Mr. McGUIRE: No doubt the parasite would be greatly increased because of the great increase of the grasshopper.

Dr. BARTON: Yes.

Hon. Mr. McGUIRE: Have you any hope that in that way the grasshopper plague may be controlled?

Dr. BARTON: It seems to be slow. Our people are not as hopeful of the parasites as they are of a combination of other conditions.

The CHAIRMAN: Have we disposed of the grasshopper problem?



Hon. Mr. SHARPE: I hope so, Mr. Chairman.

Hon. Mr. SINCLAIR: Your organization is complete for the coming year?

Dr. BARTON: Yes, we have never been so well organized as for the coming year.

Hon. Mr. SINCLAIR: Is the work directed by the federal Government?

Dr. BARTON: The provinces assume responsibility for the organization and direction of the work, but our staff fit into that organization. They, of course, supply the technical guidance, they also make these surveys of infestation, and they are doing investigation work.

Hon. Mr. BURNS: I suppose in Alberta we would get our information from the municipality?

Dr. BARTON: Yes, and through the local committee.

Hon. Mr. SINCLAIR: Is \$700,000 or \$800,000 the only expenditure that you are making?

Dr. BARTON: That is the whole expenditure.

Hon. Mr. SINCLAIR: Part by the province and part by the municipality?

Dr. BARTON: Yes.

Hon. Mr. SMITH: The total cost you gave us is for material?

Dr. BARTON: Largely for material.

Hon. Mr. SMITH: Does it include labour?

Dr. BARTON: Any labour that might be employed specially for the purpose.

Hon. Mr. BURNS: The farmers themselves do the work for nothing, such as hauling the sawdust and other material. I noticed them doing it last year.

Hon. Mr. SHARPE: They look after their own farms.

Dr. BARTON: They distribute the materials.

Hon. Mr. SINCLAIR: The distribution is under the direction of the province?

Dr. BARTON: Yes.

Hon. Mr. HORNER: I have heard from the University of Saskatoon that alarm was being felt that they would be late in getting started on the grass-hopper prevention work unless they were able to secure the necessary money.

Dr. BARTON: My understanding is that the Dominion will supply the money.

Hon. Mr. HORNER: It has already been done?

Dr. BARTON: So far as I know.

Hon. Mr. SHARPE: For all three provinces, or for Saskatchewan only?

Dr. BARTON: For all three, I understand.

The CHAIRMAN: Dr. Barton, will you now take up the next phase?

Dr. BARTON: With regard to the cattle situation, Mr. Chairman, I think you mentioned the export quota.

The CHAIRMAN: Yes.

Dr. BARTON: I have a very brief picture here of the cattle export situation. For the first three months of 1934—that is this year—on the basis of 1933, because that is the basis, the quota was 6,864 head; then for the first six months it was extended to 20,200. These figures represent the actual importations of cattle into the Old Country during that period of 1933. Our quota is based on that figure.

Hon. Mr. BURNS: How much?

Dr. BARTON: It is 20,200.

Hon. Mr. BURNS: For the full year?

Dr. BARTON: For the first six months. That is our quota. That represents the number of cattle actually imported.

Hon. Mr. RILEY: The number exported to Great Britain last year?

Dr. BARTON: Yes. Up to March 7th, for this year which includes two weeks in December, because cattle shipped in the latter part of December arrived there in January, a period of eleven weeks, our figures are 10,300. Of this number 443 were sunk with the Concordia. For the 15 weeks remaining to June 20th, because after that the arrivals will be in the next six months, we have 11,900 left.

The CHAIRMAN: How much does the quantity shipped in the first eleven weeks you refer to compare with the first eleven weeks of 1933?

Dr. BARTON: Have we got the first eleven weeks' period separate, Mr. Light? For the first three months it was 6,864.

Mr. LIGHT: It would be somewhere in the neighbourhood of 4,000 odd for the first eleven weeks.

Hon. Mr. SINCLAIR: You have eleven thousand available for the remainder of the six months?

Dr. BARTON: Yes.

Hon. Mr. SINCLAIR: How many were shipped during that period last year from March to June?

Dr. BARTON: Our dates do not quite jibe here on that basis.

Hon. Mr. SINCLAIR: In other words, how many are available on the quota now to the end of June?

Dr. BARTON: There are 11,900 still available.

Hon. Mr. SINCLAIR: How many did you ship last year in that period?

Dr. BARTON: It would be the difference, I suppose between 10,300 and 6,864, plus the 11,900, which would be roughly 15,000.

Hon. Mr. SMITH: Is our quota this year restricted to the same number as last year?

Dr. BARTON: That is the basis.

Hon. Mr. RILEY: For the first six months.

Dr. BARTON: Yes.

Hon. Mr. POPE: Does that mean cows and everything else?

Dr. BARTON: Yes.

Hon. Mr. RILEY: From information that you have would you say that that quota is likely to be filled?

Dr. BARTON: Yes, it is. The only thing we have to go on, of course, is the shipping space which has been taken. And that is not always used after it is taken. But there is more than enough space taken now to fill the quota.

Hon. Mr. RILEY: Is the space always paid for if it is not used?

Dr. BARTON: I cannot say as to that.

Hon. Mr. RILEY: Perhaps Senator Burns may be able to answer that.

Hon. Mr. BURNS: I know we always have to pay for space when we buy it, whether we fill it or not, but we always have filled it.

Dr. BARTON: It works the other way too. Some times boats do not sail at all and there is a reduction of space in that way.

The CHAIRMAN: Dr. Barton, I gather from the information you have given us that the quota is likely to restrict the exporting of a number of cattle that will be available for export before the six months are up.

Dr. BARTON: I cannot be sure of that.

The CHAIRMAN: That is the indication, I should say.

Hon. Mr. BURNS: No, I should say not, Mr. Chairman. If they have 11,000 to put in yet before the 1st of June, it is going to take them all the time to get the cattle. You see, there are not so many cattle this year.

Hon. Mr. RILEY: I think Senator Burns is right.

Hon. Mr. BURNS: The people who have the space will be worrying a bit now about how they are going to fill it. The feed has been very scarce.

Dr. BARTON: It is possible, of course, that there was some tendency to ship earlier because of the restriction.

Hon. Mr. SINCLAIR: Dr. Barton, what is the method of control that you exercise on exporting?

Dr. BARTON: There is no method of control or machinery developed for it in our department at present.

Hon. Mr. HORNER: Is there a possibility, then, that the quota may be filled and a man may take space and make a shipment of cattle which would be refused over there?

Dr. BARTON: Well, I suppose there is a possibility of that. But if we shipped more cattle than our quota provided for, it might be that the same thing would happen as has happened in the adjustment of the quota previously, namely, that our surplus would be carried over for application on our next quota, should there be one.

The CHAIRMAN: Has it not been a request to limit shipments, rather than an enactment?

Dr. BARTON: Yes, it has been a request.

Hon. Mr. HORNER: In any case, it was an estimate, with the possibility that they might take a larger amount than the quota?

Dr. BARTON: It was based clearly on the importations of last year. For the first nine months of last year the importations were 35,996, and for the twelve months, 51,433.

Hon. Mr. HORNER: Of course, that is a much larger average than has been going across for the past ten years.

Dr. BARTON: Oh, yes.

Hon. Mr. POPE: Do they want any feeders?

Dr. BARTON: Well, they take them at times, of course.

Hon. Mr. SINCLAIR: There is no information as to any change in the quota for the last half year, is there?

Dr. BARTON: No, we have no information.

The CHAIRMAN: I suppose the quota for the last half year is likely to depend upon the price that the English cattle producer is getting for his cattle. I understand the object of the quota was to ensure that the English producer would get a fair price.

Hon. Mr. SINCLAIR: Have you any information about the Irish cattle situation, Dr. Barton?

Dr. BARTON: I do not know that we have any recent information. The tendency has been for the numbers to decrease from year to year.

Hon. Mr. BURNS: They used to put out from 800,000 to a million Irish cattle a year.

Dr. BARTON: I have here a copy of a statement that was made in the British House of Commons on December 20, 1933, dealing with the importation of cattle for immediate slaughter. It says:—

At present, such cattle are imported into the United Kingdom from two sources only, namely, the Irish Free State and Canada. As



regards the Irish Free State, an Order will be issued forthwith under the Agricultural Marketing Act, 1933, under which it is intended to limit the imports of fat cattle from the Irish Free State from now to the 31st March next to 50 per cent of the numbers imported in the corresponding period of 1932-33. As a complementary measure, it is also intended under the Order to limit the number of stores that may be imported from the Irish Free State. In terms of total cattle imports from that source, the reduction will be in the neighbourhood of  $12\frac{1}{2}$  per cent. The Order, also as a complementary measure, will prohibit the importation of beef and veal and beef and veal offals from the Irish Free State. (Imports into the United Kingdom from the Irish Free State in the three months January to March, 1933, were 46,148 head of fat cattle, 75,267 head of store cattle, and 895 hundredweight of fresh beef.)

Hon. Mr. BURNS: I did not think they shipped dressed beef at all.

Dr. BARTON: Yes, they do.

Hon. Mr. BURNS: The cattle that we ship at present do not amount to a drop in the bucket, as far as Great Britain is concerned. Suppose we shipped forty, fifty or sixty, thousand, it would not be enough to supply them for one day.

Dr. BARTON: It seems like a mere bagatelle.

Hon. Mr. BURNS: It would not be enough to supply the needs of about 45 million people for three meals. The same thing is true with regard to United States. Suppose we shipped 100,000 head there, that would not be enough to supply that country with one meal.

Hon. Mr. McGUIRE: Are they not importing live cattle from the Argentine now?

Dr. BARTON: No.

Hon. Mr. McGUIRE: The importations are from Ireland and from Canada only?

Dr. BARTON: Yes.

Hon. Mr. McGUIRE: And they are reducing the Irish importations by twelve and a half per cent. Is there any suggestion of increasing the importations from Canada correspondingly?

Dr. BARTON: No, not that I know of.

Hon. Mr. BURNS: It is the dressed meat that comes in from the other countries.

Dr. BARTON: The Argentine is the big competitor.

Hon. Mr. RILEY: The purpose of these restrictions is to raise the prices to their own producers?

Dr. BARTON: Yes.

Hon. Mr. HORNER: Have they taken meat from Australia?

Dr. BARTON: Yes.

Hon. Mr. HORNER: Mutton. Any live cattle?

Dr. BARTON: No.

Hon. Mr. BURNS: Do you keep track of the amount of corned beef that comes in here from the United States and other countries?

Dr. BARTON: Yes.

Hon. Mr. BURNS: The corned beef that comes in here amounts to about 40,000 or 50,000 cattle a year.

Dr. BARTON: It is quite an item, from the Argentine and from Australia.

Hon. Mr. HORNER: Is there any plant in Canada to-day putting up tinned beef?

Hon. Mr. BURNS: No. Two or three plants started, but they couldn't make it go. The product is brought in cheaper from other countries; it comes in at about six cents a pound. When a beast that weighs 500 pounds is put in cans—boiled down and the bones taken out—it weighs only about 160 or 170 pounds.

Hon. Mr. RILEY: The Australian canned beef was always of superior quality. That is why the people here preferred it.

The CHAIRMAN: Are there any further questions?

Hon. Mr. BURNS: We poor fellows in the West would like to hear of some way of raising the price of cattle. Otherwise I don't know what we are going to do.

The CHAIRMAN: We would all appreciate a rise in the price of cattle.

Hon. Mr. HORNER: Do you not think it would be possible for someone here to supply that canned beef? We in the West are ideally situated to raise great numbers of cattle, and if we could secure that market for 40,000 or 50,000 head that are now coming in in cans it would help the breeders of cattle, and the canning would give employment to many people. Furthermore, the class of cattle that would be used for that purpose now injures the market for the good cattle.

Hon. Mr. POPE: Have you any figures as to the export of bacon and hogs last year?

Dr. BARTON: Yes. Our export of bacon last year amounted to 71,524,700 pounds. The previous year it amounted to 30,663,400 pounds.

Hon. Mr. POPE: It was doubled last year. How far can we go in that direction?

Dr. BARTON: We have been asked to estimate our output for this year. It is a very difficult thing to do. There are many uncertain factors involved. But there is a great interest in hog production now.

Hon. Mr. HORNER: How much more than we were able to supply would the market have taken?

Dr. BARTON: Four times as much.

Hon. Mr. HORNER: The position of the man who feeds hogs is not like that of the manufacturer of any commodity. The man in any other business knows what he is going to get, and can finance accordingly, but the man who raises hogs cannot do that. It is very important that a hog should be marketed when he weighs not more than 230 pounds. When you come to sell the market may be down one cent. That one cent means your entire profit is gone. I had any amount of grain last year worth 40 cents a bushel, but I could not go to my banker and say, "I am going into hogs on a large scale, I have so many bushels of grain for feed, and I require an advance." The banker knows my ability as a feeder, but because I have no idea what I shall receive for those hogs in the fall he cannot finance me. Hog raising is in a different position from any other business. I can sell grain for next October delivery before I seed it, if I wish, but hail, frost and grasshoppers might take that crop, and I might be caught; but if I have the feed on hand I would be able to deliver my hogs at the end of a certain period. If we could get the business on a contract basis we should have something definite to work on.

Dr. BARTON: You are dealing with a perishable product in the case of hogs.

Hon. Mr. HORNER: Not as perishable as bacon.

Dr. BARTON: But it is more perishable as compared with wheat.

Hon. Mr. HORNER: I mean as live stock, not as bacon?

Hon. Mr. RILEY: There must be some stablization of the market before farmers will again go into the raising of hogs.

Hon. Mr. HORNER: We need certainty of price. If a farmer takes a loss on wheat, he is over and done with it; but feeding stock at a loss is one of the hardest things in the world to persuade a farmer to repeat.

Hon. Mr. BURNS: If you could only assure a price of five cents a pound at point of shipment there would be no trouble, and a lot of money would be left in the country. I think our own company to-day is paying \$4,000,000 a month more than they were a year ago for hogs. A year ago we were paying two and a half cents a pound; to-day we are paying eight and nine cents a pound. Take Alberta and Saskatchewan, I would say that there would be a difference of between \$10,000,000 and \$15,000,000 in the price paid for hogs to-day as compared with a year ago. I think five cents is low, but if six cents could be assured Saskatchewan and Alberta would forget their hard times in a month.

Dr. BARTON: One organization in the West, I believe, has guaranteed a minimum price of five cents for three years.

Hon. Mr. BURNS: Then there will be a large number of hogs raised.

Hon. Mr. RILEY: Farmers I have talked with tell me they are through raising hogs. They say, "What guarantee have we got that when the next batch of hogs is ready for market the price won't be the same as it was a year ago, two and a half cents?" Until there is stablization of the market they are not going to raise hogs, and you will not fill your quota of 280,000,000 pounds.

Dr. BARTON: Hogs multiply quickly. Price is the great incentive, and very often it means the undoing of the market. As you say, it is impossible to predict prices, but we are situated a little differently than we were. The explanation of the high price to-day is the action which the British authorities have taken through their quota regulation to raise the price to their own hog producers. Now the question is whether or not they can maintain it. But they have been able to raise the price, and we have an assured place in that market, whatever it is, to the extent of 280,000,000 pounds for some time to come.

Hon. Mr. BURNS: The farmers would soon clear off their mortgages if they could get a price like that.

Dr. BARTON: We are anticipating a substantial increase this year, but it is impossible to say what it will be. There are other factors, for instance, the consumption here. We are exporting now more bacon than we did last year; at the same time our hog production figures are lower. We have estimates of a decreased hog production last fall. That means that a larger proportion of our manufactured bacon is going to the Old Country than was the case last year. As the price goes up consumption here goes down. It is the same with beef: people are eating more of the lower price beef, and there is some movement in the price of cattle. There are some sales of six cents, which is at least a hopeful indication. All these things are interlocked, one reacts on the other.

Hon. Mr. RILEY: Dr. Barton, our export price governs the price at home?

Dr. BARTON: It certainly does in large measure, and it is doing so now, but our consumption at home will react on the price.

Hon. Mr. RILEY: Is it true that at the present price of bacon live hogs should not fetch over four and a half cents?

Dr. BARTON: At the present price of bacon in the Old Country?

Hon. Mr. RILEY: Yes.

Dr. BARTON: The relationship?

Hon. Mr. RILEY: Yes.



Dr. BARTON: No, I should say it is not true.

Hon. Mr. BURNS: They are paying eight cents for hogs.

Hon. Mr. RILEY: I know, but I have heard it said that our hogs here should not sell for more than four and a half cents a pound if the Old Country market governs the price.

Dr. BARTON: I would say our price at the present time is definitely related to the Old Country market.

Hon. Mr. BURNS: If the price went up to not over six cents a pound, then conditions would improve in the West.

Hon. Mr. SHARPE: You mean British breeders control this market?

Dr. BARTON: Yes, certainly, Great Britain is buying less bacon from Denmark and Germany, and other countries.

Hon. Mr. RILEY: We cannot dictate the policy of the Old Country.

Hon. Mr. BURNS: No, but they can in Europe.

Hon. Mr. HORNER: The grading of hogs was intended to help the producer, but it has helped the packers.

The CHAIRMAN: The grading of our hogs has greatly improved the quality on the market.

Hon. Mr. SHARPE: I think Senator Horner is absolutely right.

Hon. Mr. BURNS: Oh, no, he is not. That is one of the best things the Government ever did for the farmers. They come in with their hogs, and the Government men set the grade.

Hon. Mr. HORNER: Who sets the price?

Hon. Mr. BURNS: The packers.

Dr. BARTON: I think this is a fair statement to make: the grading system has been one of the big factors in the improvement of the hogs in this country. If we did not have the hogs as we have them now, our position in the Old Country would be seriously jeopardized.

Hon. Mr. BURNS: There would be a greater improvement in hogs if the farmers were assured of a market. I must say that the Government is doing a lot to help the farmers get the right kind of hogs.

Dr. BARTON: We think that hogs are improving in quality very rapidly at the present time.

Hon. Mr. BUCHANAN: What type of hog is required in England for the best bacon?

Dr. BARTON: Well, the Yorkshire hog is the hog that we are pinning our faith to here.

Hon. Mr. BUCHANAN: But what do they look for in the British market?

Dr. BARTON: Well, the Wiltshire bacon, and that calls for a certain type of hog. It demands length, and a hog that will finish a certain amount of fat at a good weight, and with the loin and ham of such a type and conformation as will dress up with a minimum amount of waste.

Hon. Mr. BUCHANAN: To what extent are we able to meet that demand at the present time?

Dr. BARTON: In Eastern Canada, in Ontario, a large percentage of our hogs will meet that demand. In the West we are in a transition stage just now, but the condition is improving very rapidly and there will be a big improvement this year. We have got practically one breed accepted throughout Canada, the Yorkshire. I think that in the West they will have problems with regard to what I call hog practice, because the type is one thing and the development of the pig is another. There are people in the West who are producing first

class bacon hogs, but the practice is one that calls for a certain amount of skill and technique. The average man in the West, accustomed to doing things on a large scale, is going to have his difficulties, even with the right type of hog, until he develops a practice that will mature those hogs at the right weight, at a certain age.

Hon. Mr. SMITH: What is being done, Dr. Barton, to inform the public in the West?

Dr. BARTON: A great deal is being done. The provincial departments and our department are very active in this work. Contact is made with the farmers in every way possible, and of course they now have a very good conception of what is required.

Hon. Mr. SMITH: I understood you to say they were not familiar with the best practice.

Dr. BARTON: Well, that can only be overcome by a process of education. My thought, after going through the West, is that they have problems out there calling for examination and study.

Hon. Mr. HORNER: It is more expensive to raise the proper type of hog. You must keep them nearly a month longer, for one thing. In Montreal they will take a hog for bacon at 250 pounds, but out in Saskatchewan they are more strict. If a hog weighs 231 pounds you lose a cent and a half. I took a truck load of hogs down and they were a little heavy, so I had them run around a bit and then reweighed, and I got a cent and a half per pound more. I am speaking now of good bacon hogs that are a little heavy.

Hon. Mr. RILEY: It is not good to let these selects have very much exercise?

Dr. BARTON: I would not say that. It depends upon how they are cared for. You can certainly pasture hogs and produce good bacon. Most of our hogs in the East are pen fed, but they do produce hogs in the East under pasture conditions.

The CHAIRMAN: I think exercise does them good.

Hon. Mr. SINCLAIR: If we are through with the question of hogs, I should like to ask a few more questions from Dr. Barton with regard to cattle.

The CHAIRMAN: We have had Dr. Barton on the witness stand for an hour and a half now. We must not ask too much of him, but if he cares to continue, all right.

Hon. Mr. SINCLAIR: Have you any information, Dr. Barton, regarding the number of feeders that are taken from the West and finished in the Eastern part of Canada?

Dr. BARTON: I cannot give the actual number, but I know it is a way down this year as compared with last year.

Hon. Mr. POPE: There has been a lack of feed, a short hay crop.

Dr. BARTON: Yes, and possibly a lack of money.

Hon. Mr. SINCLAIR: Has it been profitable?

Dr. BARTON: I should say it has been profitable in the past. Of course, it is one of those hazardous ventures.

Hon. Mr. SINCLAIR: Is it a practice that should be encouraged?

Dr. BARTON: I think it is.

Hon. Mr. SINCLAIR: What is possible in the way of encouragement?

Dr. BARTON: Well, one thing we have done this year that we think might mean some encouragement, is the securing of a concession in railway rates on cattle for export, from eastern feeders to the port.

Hon. Mr. SINCLAIR: It would be a benefit to central Canada feeders more than to the Maritimes.

Dr. BARTON: Directly; but I believe that anything which facilitates the movement of cattle from the West to the East, and to the Old Country, is in the interest of the cattle business as a whole.

Hon. Mr. RILEY: Is that rate on feeders in operation now?

Dr. BARTON: It is to come into effect in April this year. I am not positive of the date at the moment.

Hon. Mr. HORNER: Was there not an arrangement made about two years ago, that a person could get the through rate and be allowed to stop off and feed the cattle, yet be charged only the same rate as if he shipped right through from Calgary to the Maritimes?

Dr. BARTON: I do not think so. There was an arrangement somewhat similar to the one we have now, but it was on a rebate basis and did not work out very well. This is a straight cut in the rate.

Hon. Mr. SINCLAIR: If the feeding farm is in a disease free area—

Dr. BARTON: I am glad you mentioned that. That is another thing we dealt with. We realized that in some cases there was a hardship imposed on people bringing cattle East to feed in an area free from tuberculosis or under control. We made an arrangement whereby the cattle could be shipped to destination and tested there. Of course they have to be kept separate from other cattle.

Hon. Mr. SINCLAIR: Is there any cost to the farmer?

Dr. BARTON: No, but he does not get any compensation for loss. One factor is the transportation; another factor is the feed cost. I think we ought to do everything we can to facilitate the movement of surplus coarse grain from the West to the East. It seems to me that there will be a large production of coarse grains in the West which could be shipped to the East; but the cost of getting it here is too high.

Hon. Mr. SINCLAIR: For many years we have had sufficient feed in the Maritimes to take care of that.

Dr. BARTON: Yes, and I think you could develop some cattle feeding down there.

Hon. Mr. SINCLAIR: The reduction of the rate to the port means very little to us, the distance is so short.

Dr. BARTON: It is quite a consideration even in the East.

Hon. Mr. BURNS: With so much grain in the West it would be foolish to ship cattle some place else to feed.

Hon. Mr. SINCLAIR: It is not possible for the small eastern farmer to produce cattle and finish it for the British market; but if he can buy young cattle he can ship with a smaller degree of shrinkage.

Hon. Mr. RILEY: I think it is more profitable to finish in Ontario, Quebec, or the lower provinces than to finish in the West, because it is the last hundred pounds you put on a steer that puts the bloom on him. When you ship him to Montreal for export the bloom is gone, whereas if you put the bloom on him down here it still remains when he gets over there.

Hon. Mr. BURNS: I do not agree with that. The thing to do is to feed the cattle where they are, and feed them well. During the three or four days or the week that they are on their way to Montreal they will shrink, say, ten per cent, but they will recover half of that in the yards, and the remainder on the boat.

Hon. Mr. RILEY: But you have to put that hundred pounds on them twice.

Hon. Mr. BURNS: Someone has spoken of shipping the cattle and the feed to the East.



Dr. BARTON: Only a part of the feed, the concentrated grain.

Hon. Mr. BURNS: You have the feed and the cattle in the West. Why ship them east?

Dr. BARTON: Many cattle are going through now that should be fed more than they are.

Hon. Mr. SINCLAIR: In the average year we have plenty of feed—hay, grain and roots—and it seems to me that there is plenty of opportunity for finishing young cattle from the western ranges on our farms and sending them on for export. In that way we would get a better grade of cattle. We have not a uniform grade in the East. By buying western cattle we would get an animal that was true to type, and being near the seaboard the shrinkage would be less. If a minimum freight rate could be secured for cattle going to the Maritime Provinces, I think it would do much to encourage that business.

Hon. Mr. BURNS: I do not want to be misunderstood. That is quite right if you have the feed.

Dr. BARTON: I should not like to be misunderstood either. My idea of bringing the coarse grains down here is for supplemental feed.

The CHAIRMAN: I think, gentlemen, we have had a very good meeting, and if you are through now we will relieve Dr. Barton.

On behalf of the committee, Dr. Barton, I should like to thank you for coming here this morning and for the very interesting information which you have given us. I think I might go even further, and say that we would like to compliment you on your ability to impart information in a very pleasing manner.

Some Hon. SENATORS: Hear, hear.

Dr. BARTON: Thank you, very much. It has been a great pleasure for me to meet you, I am sure.

Hon. Mr. BUCHANAN: What dependence can you place on the red or blue label beef that you get in a hotel or on a railway train?

Dr. BARTON: Like other things, beef grading is not infallible. The final test of the beef is in the eating.

Hon. Mr. BUCHANAN: If you are eating red label beef and it does not taste like it—

Dr. BARTON: That is unfortunate. But in the great majority of cases you can rely upon the marketing. The beef is graded in the packing houses, and those two grades are checked. We do not actually do the grading, but we check it. There may be times, of course, even if the work is done conscientiously and as intelligently as it possibly can be, when a carcass may grade red label but be disappointing when you come to eat it. It is not mathematically or humanly possible to grade beef absolutely accurately, but it is possible to classify it in a broad way. Graded beef has increased in consumption to a gratifying extent, and we believe it gives the consumer some assurance of quality. Nevertheless, at times you will have the experience you refer to. I have had it myself.

Hon. Mr. BUCHANAN: The blame is on the packers, I suppose.

Dr. BARTON: I would not say that.

Hon. Mr. SINCLAIR: If I might refer to the inspection in the disease free areas, I would ask if you have done any of that work yet?

Dr. BARTON: Yes, some.

Hon. Mr. SINCLAIR: Has the percentage of reactors proved to be high? Is there much danger?

Dr. BARTON: Oh, I see what you are getting at—the existence of disease in areas that are free.

Hon. Mr. SINCLAIR: Tuberculosis.

Dr. BARTON: Oh, the post-mortem examinations confirm the tests.

Hon. Mr. SINCLAIR: It is not the accuracy of the test. Are many reactors showing up?

Dr. BARTON: Do you mean the cattle that are in the areas?

Hon. Mr. SINCLAIR: The cattle that were brought into the West for feed.

Dr. BARTON: I could not answer that.

Hon. Mr. SINCLAIR: Is there much risk of infection in doing that?

Dr. BARTON: No, I would say the risk is very small. The percentage of reactors among the western feeder cattle is very, very small, almost negligible.

Hon. Mr. RILEY: We pay a quarter of one per cent insurance on every beef animal we sell up there off those ranges.

Dr. BARTON: There are other things besides tuberculosis.

Hon. Mr. RILEY: It covers other things, but originally it was put on to cover tuberculosis, but we never had any there.

Hon. Mr. BURNS: The cattle are out in the air and do not get any disease as they do in the East.

The CHAIRMAN: Thank you, Dr. Barton.

The Committee adjourned at the call of the Chair.

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#### THE SENATE,

WEDNESDAY, March 21, 1934.

The Standing Committee on Agriculture and Forestry resumed to-day at 10.30 a.m.

Hon. Mr. Donnelly in the Chair.

The CHAIRMAN: We are fortunate in having with us this morning Mr. Robinson of Melbourne. I understand he is interested largely in dairying.

Mr. Robinson, proceed in whatever way you think best.

Mr. F. E. M. ROBINSON: Perhaps, Mr. Chairman, I had better tell the Committee what I do for a living.

The CHAIRMAN: You can first make a statement in regard to dairying.

Mr. ROBINSON: I was born in the Middle West of the United States of Canadian parents and educated at Montreal schools and at Trinity College, Cambridge, in England.

I have been dairy farming in the Eastern townships for twenty years. From 1929 to 1932 I was President of the National Dairy Council.

I own and operate three dairy farms near Upper Melbourne. I keep from 120 to 130 head of pure bred dairy cattle and ship my milk to Montreal. That keeps me busy.

*By Hon. Mr. Pope:*

Q. Do you ship milk or cream?—A. Milk.

Q. Why don't you ship cream?—A. I used to, but at the present time milk is better suited to the situation of my particular farms. It might not be

to somebody else. I should like to say also that from 1922 to 1928 I owned and operated three creameries shipping cream to the United States. This industry, as you know, was nipped in the bud by some of the tariff activities of our friends over the line. I sold the creameries before the business extinguished itself.

*By Hon. Mr. Sharpe:*

Q. Were you ever in the cheese business?—A. No, sir.

*By Hon. Mr. Horner:*

Q. Do you get a special price for your Jersey milk?—A. I used to. In recent years I have found it advisable, and in a sense still do, to take the same price as other people receive per pound of butter fat, but to trade the extra quality reputation, if you like to so term it, of my herd for a no surplus contract. In other words, all my milk is sold at the Association price, and I find that more valuable than selling part of it for a fancy price which possibly you could get, even in these days, and having an indefinite amount of it skimmed and left over, or at home, or what not.

*By Hon. Mr. Gillis:*

Q. I suppose that milk from the Jersey breed contains more butter fat?—

A. Yes, about five per cent.

*By the Chairman:*

Q. Mr. Robinson, do you wish to make a further statement about the condition of the dairy business in general, before answering questions?—A. No sir, I am quite prepared to answer questions.

*By Hon. Mr. Sinclair:*

Q. Do you sell to the trade direct or to the consumer?—A. I sell to the trade.

Q. For city use or manufacture?—A. For city use.

*By Hon. Mr. Gillis:*

Q. I suppose that with the quantity you handle you could not sell direct to consumers?—A. Not very well. I am seventy-five miles from Montreal, and it would require the building up of a little organization in there, which is expensive and hazardous.

*By Hon. Mr. Pope:*

Q. Do you not think it would be better to sell the cream and keep the skimmed milk and fatten pigs, and do some business that way?—A. Yes, I think so, but when one's farm is situated two miles from a railway station on a good road, one is within the district in which the shipping of milk is probably in the long run a little more profitable than the other system. If I lived two or three miles further away I certainly would sell cream.

Q. What about cheese? Should we not make part of our milk into cheese, instead of all into butter in the summer, in Eastern Canada?—A. Very likely we should, but I do not think we will.

Q. Why not? We used to.—A. Yes. The fact that cheese has declined, with very few exceptions, continuously since 1901, is pretty fair evidence that that is a definite tendency in the industry. The maximum year of export from this country was 1901, if my memory serves me right. It has been declining now for thirty-two years.



Q. You mean the quantity?—A. Yes. It was over 200 million pounds then, and last year it was 85 million pounds.

Q. But we were shipping cream and milk and everything else to the United States, until they cut our throats.—A. Even that did not revive the cheese industry.

*By Hon. Mr. Gillis:*

Q. At the prevailing prices of butter and cheese, would it be more profitable to manufacture cheese instead of butter?—A. At the moment, no, when butter is high and cheese is not so high. Butter will no doubt fall in the next few weeks, but I can only suggest to you that if cheese were really more profitable than butter, more farmers would make it.

*By Hon. Mr. Pope:*

Q. Our cheese is shipped too green; it is not matured.—A. Some of it.

Q. The Englishman likes matured cheese.

*By Hon. Mr. Sharpe:*

Q. Are you getting what you consider a fair price for your milk now? One sees a great deal of complaint about it in the papers.—A. I remember getting \$4 per 100 pounds for milk and complaining about it. I do not think you can eliminate requests for higher prices by raising prices. That is really a very involved question. I do not know whether it is a fair price or not. I am taking it and breaking even.

Q. Are you making any money out of it?—A. I am making operating wages, repairs and taxes, but no interest whatsoever.

Q. Then it is not a fair price?—A. Is anybody else making interest, in a broad way, in the country?

Q. We are talking of this industry now.

*By Hon. Mr. Horner:*

Q. Do you think that you are receiving more from your milk and your cows than if you were shipping cream?—A. Yes.

*By Hon. Mr. Sinclair:*

Q. What does \$4 represent on the butter fat basis, per pound?—A. Eighty cents.

*By Hon. Mr. Horner:*

Q. We hear a lot about price spreads, unethical business methods, and so on. Would you care to say what price you believe the farmer should receive for his cream in order that he could pay living wages and have wages for himself?—A. No, sir, I certainly would not be prepared to make any such statement, because I have no idea to what extent such regulation as you suggest would affect the farmers' costs, both direct and indirect; and having no means of knowing that, I could not say whether a proposed price would be fair or not. To say that a certain price would be fair if conditions remained the same, is meaningless, because conditions would not remain the same.

*By Hon. Mr. Gillis:*

Q. The inquiry in the other House last year was in connection with the profits made by middlemen. I suppose you know the average price for milk per quart in Montreal and other cities?—A. Quite well.

Q. What is the difference between that and what you receive for it, roughly?—A. Oh, roughly twenty-six cents or twenty-seven cents a gallon spread.

Q. That is the middlemen's profit?—A. Yes. And since with possibly one or two exceptions in Montreal they are all losing money, it is rather difficult to say that that should be at the moment reduced.

Q. You do not think that what they are making is exorbitant?—A. What they are charging is exorbitant, but not what they are making, sir. They are not making anything.

*By the Chairman:*

Q. Do I understand you to say that the distributors are not making anything?—A. No, sir, they certainly are not. I omitted to say, and I would like it inserted at the proper place in my statement of what I was doing, that I am also a director of several dairy companies, and therefore speak with some knowledge when I say that we are not making money.

Q. The dairy companies make a business of supplying milk to people in Montreal?—A. Yes, sir, Montreal, Toronto and western cities also.

*By Hon. Mr. Sinclair:*

Q. When you say they are not making money, what is the cause of it? Can they not collect, or are there any other special reasons?—A. The causes are very complex, sir, and would take a long time to explain. But briefly, they are entirely excessive costs, based on luxury services, over-competition, some over-capitalization, reduced volume, and relief milk, which they are compelled to sell at a reduced price, although it costs just the same to deliver as any other kind of milk.

Q. It has to be sold at a set price?—A. Yes, these are a few of the reasons, and all of them could be amplified.

*By Hon. Mr. Horner:*

Q. Have you a knowledge of the workings of the Milk Pool of Saskatoon?—A. Yes, sir.

Q. It is working satisfactory, as far as the company is concerned?—A. So far.

*By Hon. Mr. Little:*

Q. When you say that there is a spread of twenty-six cents a gallon, is that at the present time, taking this relief milk into consideration?—A. Yes, sir. I am speaking very generally, Senator Little. I think it is about that at the moment, but I would have to refresh my mind with figures. Relief milk in one of the companies in which I am interested works out between 18 and 20 per cent of the whole volume they sell, and they have to sell it for one and a half cents a quart less than the ordinary price. If they stopped selling it they would lose the customers, if as and when any of the families stop being on relief. However, the rectification of these troubles is not, I take it, part of the purpose of this inquiry, and it would be a very long story to go into.

*By Hon. Mr. Gillis:*

Q. Do you think the public is pretty well treated by those dairy organizations that are taking the milk from the farmers? Do you think they are not robbing the people at all?—A. Such robbery as might be charged to them is incidental to a chain of mistakes extending back over a decade or more. It is the inevitable result of faulty policy, and faulty ideas and ideals on the part of distributors and the public, extending away back over the last twenty years, ever since the war started. It is not that they have consciously or wickedly upset an ideal arrangement this year and started to rob the public. They are fighting for their lives and doing all sorts of crazy things, because they have been doing crazy things ever since 1914.

*By the Chairman:*

Q. At the present time what is the average price per quart paid for milk by the consumer in Montreal?—A. That likewise is a difficult question to answer, because, presumably, ultimately the consumer buys all the milk sold at wholesale—through hotels, grocery stores and small dealers. Probably it is in the neighbourhood of eight and a quarter cents. It is just a guess.

Q. Perhaps I should have said the prevailing price.—A. I wish there was one. The house to house delivery is ten cents, ostensibly. Actually some cuts are given in the case of large customers, and there are what we call small peddlers selling for eight cents right now.

*By Hon. Mr. Sinclair:*

Q. As a producer, what do you receive?—A. Forty-three cents a pound butter fat, which is on the basis of \$1.50, which is the price in Montreal for 3.5 milk.

*By Hon. Mr. Sharpe:*

Q. What does that work out at a quart?—A. Five cents, approximately.

Q. They double the price, then.—A. But that, of course, sir, is a very good price, because I am selling Jersey milk, very high in test.

Q. You said you got the common price.—A. I got the common price per pound of butter fat. My milk tests about 5.

*By the Chairman:*

Q. Is 3.5 the standard required?—A. Yes, sir.

*By Hon. Mr. Sharpe:*

Q. And we pay at our door ten cents a quart for it. We do not know what test that is at all. What does the average farmer get for that a quart?—A. Oh, three or three and a half cents a quart; sometimes less.

*By Hon. Mr. Pope:*

Q. Never more?—A. Never more under present circumstances.

Q. Never more, and sometimes less.—A. I should like to point out very definitely that it is not any absolute level of price that attracts a farmer into a given line of agriculture business; it is the relative price; it is whether such a price is high or low compared with the returns in some other line of activity in which that farmer can engage. You have just intimated that the price received by farmers who supply whole milk is probably an inadequate price. It is; but it is less inadequate than the price received for manufacturing milk at present. Therefore, relatively speaking it is a good price, not a bad price. The fact that the price does not enable me to make interest on my money is, if you like, the fault of the times. The whole society of Canada is failing to make interest on its money at the present time.

*By Hon. Mr. Sharpe:*

Q. When you are delivering common run of milk for three and a half cents you hand it over to some person else, and he sells it at ten cents?—A. Yes.

Q. That man must be making money?—A. I wish he was.

Q. Where does the expense come in?—A. That is a long story. There is an endless train of expenses that have grown up over a period of years. In many cities there is the Union scale of wages to drivers—Winnipeg, for instance. Wages are as high as they were three or four years ago. There are very stringent health regulations that compel the maintenance of the plant in a certain



state. That is quite right. There is the building in a competitive way of very expensive luxury plants, each firm trying to out do the other in chromium plate and plate glass. That is all gone now, but there are the structures and they have to be paid for.

Q. Then there is the delivery of the milk?—A. Certainly. There are half a dozen drivers going up the same street, and if the distributors suggest zoning the city, immediately the housewife calls up and says, "I am accustomed to buying my milk from so and so." Then there is the question of special delivery. Your wife is having people to afternoon tea, and she has forgotten to order cream, so she rings up a plant three miles away and asks them to send her half a pint of cream. That costs fifty cents, and the company gets thirteen cents for it. No company can take the initiative in dropping these services, so this goes on at a perfectly crazy level.

*By Hon. Mr. Horner:*

Q. It is your idea that that will have to stop?—A. Certainly it will stop. It will stop, because it will break down. I wouldn't worry about it.

*By Hon. Mr. Sharpe:*

Q. What would you propose in place of it?—A. Nothing. I would be afraid that anything I might propose would be worse than what we have now.

*By Hon. Mr. Gillis:*

Q. Do you think there is no remedy?—A. Time and patience, and cutting off a few corners here and there. But to set out to revamp it as our friends across the line think they are doing—you will have to get some other witness to agree to that theory.

*By Hon. Mr. Buchanan:*

Q. What do you think of the milk control policy in Winnipeg and some of the cities of Alberta?—A. I think that is possibly, temporarily, a necessary extension of governmental control of an industry that has got itself into a chaotic state, and that only such control can save the adequate distribution of a necessary commodity from falling into chaos. If there is to be control, it should be of such a nature that it would not be part and parcel of the industry, so that the industry could never stand on its own feet again. I think we shall have to have such control boards for a while in the province of Quebec. I hope our Government will do two things: first of all, so organize that control that it may be done away with after a while; secondly, recognize the fact that the chairman of a milk utilities board must be a man of judicial temperament. He is trying to arrange a price for three people whose interests are all antagonistic one to the other, the consumer, the distributor and the producer. I think it is safe to say he has got to be a man of judicial temperament. The other members of the board can safely be chosen to supply technical knowledge of the business, but if the chairman's is a mind which from its very nature leans hard one way or the other, by that very fact he is unfitted to be chairman of the board which has to deal constantly with a problem for which there exists no solution completely acceptable to the three parties involved.

*By Hon. Mr. Gillis:*

Q. It requires almost a super-man?—A. Yes. You are a consumer and want cheap milk; I am a producer and want dear milk; the third man, the distributor wants a big spread. We cannot all be satisfied.

Hon. Mr. BURNS: There is too much competition. Only the other day I was told of an instance where there were 19 rigs in one city block.

The WITNESS: Yes. At various places in Canada the farmer has been himself to blame for part of the over competitive condition in the milk distributing business. Where he was going along fairly nicely he thought the distributor was taking an unduly large margin, and he tried to remedy the situation by putting a dozen or so of his own rigs on the street. The sum total of the whole business had to be so re-adjusted as to carry the cost of those dozen rigs. The farmer saw a real grievance; there is no question of that. I am not holding up the distributor as a model, but I wish merely to show that the addition of a lot of milk delivery vans in a city where none are going out heavily loaded only aggravates the situation; it does not remedy it.

*By Hon. Mr. Horner:*

Q. But the individual farmer who undertakes his own delivery gets a larger price for his milk?—A. He generally loses money and abandons the effort after a while.

Q. I know personally a farmer about four miles of this city. He delivered his own milk for a number of years; then he quit and sold it to a distributor; he quit that again and is back selling his own bottled milk. He thinks he is making much more money by so doing.—A. My comment on that would be that in individual cases it may, of course, be so, he may be making more money. In very many cases he has no accurate knowledge as to whether he is making more money or not. He naturally keeps books, as every farmer does, with no means of knowing he is charging adequate depreciation of his waggons. He may be merely putting himself in a position where his own personal labour may be employed for a greater return than by doing more hours of work on his own farm; but that is not to say that the distribution of milk by that particular farmer is economically more profitable than by the distributor. It may be, but it may not be. He does not know.

*By Hon. Mr. Gillis:*

Q. It depends on the difference between what he receives from the individual consumer and what the trade would pay him?—A. And much depends on what he charges against those profits, sir.

Hon. Mr. LITTLE: I have been getting two dollars a hundred for jersey milk. I have been selling it since 1924 or 1925. Just as Mr. Robinson has pointed out, I took a couple of accounts, one a hotel in London, the other a large departmental store that runs a rather active cafeteria. Jersey milk used to sell in London for eleven cents a quart, but for the last year and a half the price has been nine cents. Those two accounts are worth about \$100 a month to me. After trying out this policy for two years I found there was no money in it, that it was much better to get my \$2 a hundred from the distributor.

Hon. Mr. GILLIS: You gave up delivering your milk?

Hon. Mr. LITTLE: Yes.

*By Hon. Mr. Gillis:*

Q. Are there fewer cheese factories in Canada now than there were ten years ago?—A. Yes, a few less. The dairy business, of course, is full of problems and of discontented people, but I do not think it could be substantiated that the dairy farmers as a class are any worse off than any other sort of farmers. I am sure they are not. They are certainly better off than the Western farmer at the moment.

Hon. Mr. HORNER: There are many farmers in Western Canada engaged in dairying.

The WITNESS: Fortunately.

Hon. Mr. HORNER: Last year the Saskatchewan co-operative creamery exported about 1,500,000 pounds of butter. The price the farmer of Western Canada has been receiving for his cream has been very low until just recently.

*By Hon. Mr. Gillis:*

Q. I think you said a little while ago, Mr. Robinson, that cheese making is less profitable than butter making at prevailing prices?—A. I judge that from the tendency that cheese making continues to decline. After some years' experience in producing dairy products, I personally would be very chary indeed of making positive statements as to the profitability or otherwise of given branches of agriculture. To my mind we hear far too much of statements that the cost of production of a certain agricultural commodity is a certain figure. I would never venture to make any such statement. The cost of production in agriculture does not mean the same as it does in the city. Farmers can and do go on producing things at a book loss for years. I do not say they should be called upon to do so, but they have been called upon to do so, and it produces a decay of country life. But the process does not stop. Whereas if the manufacturer is called upon to produce anything at a loss, he does not continue to do so for a number of years; he soon shuts his doors. I remember at the beginning of this lamented period we were told that wheat could not be produced in Western Canada at less than 75 cents a bushel, but it is being produced and will continue to be produced for a while at less than that figure.

Hon. Mr. BURNS: Yes, even at 30 cents.

The WITNESS: Yes. Surely cost of production depends upon the scale of living of the farmer's family, the amount of family work he puts into his farm, the amount of return he considers necessary for his own personal labour, and the interest on his investment. This may be zero for years at a time, and often is, but that does not stop him. It does not stop me making milk because I am getting no return on an investment of \$40,000. And, mind you, that is an investment figured at present values, not on past values, which are double. Even then I cannot get any interest return, but the capital is there. If I had the same sum put into paper securities I would not have that same assurance.

*By Hon. Mr. Burns:*

Q. Your plant wears out, though. The cows wear out?—A. Yes, but they also have calves. They are self-repairing machines.

*By the Chairman:*

Q. I gather from what you say that at the present time you are producing and selling milk below cost. You tell us you are not making any interest or providing for replacement.—A. No, I am not.

Q. Of course, you are in a different position from the ordinary farmer, because you are operating in a large way and you naturally have to pay for your help?—A. Yes.

Q. It is not a matter of your own family doing it?—A. Quite.

Q. If times get better and the cost of labour goes up, it would be natural that the cost of producing milk would go up?—A. No doubt.

Q. So that you would have to get a still higher price?—A. No doubt.

Q. I think the consumer feels that he is paying plenty in the city, right now, so apparently the only solution would be for some economy in the way of distribution?—A. Quite. I hate to think what the consumer will be feeling about it in a few years from now. Then he will be paying prices.

Q. You think he will be paying more?—A. I am quite sure of it.



Q. As one of the senators suggested a while ago, you cannot go on producing milk if you are not getting interest on your investment?—A. As I see it, reduced prices for agricultural products are not at first reflected in any reduction of output. Although I am not a wheat farmer, I have given quite a lot of study to grain economics. I remember being asked in 1930, I think it was, by a certain high official of the Canadian Pacific Railway Company, if I did not think that the low prices which then prevailed for grain would very soon work their own cure by resulting in greatly lessened production in Western Canada. I said that I did not think so, and he started to talk about the law of supply and demand. I replied that that was a very hackneyed argument, but since the farmer in a large part of Western Canada has no alternative but to produce wheat, he would try to produce more when the cost was low than when the cost was high. And so it has turned out. However, if the price goes low enough and continues long enough at a low level, a certain process of decay will go on; tools cannot be repaired or replaced, tractors cannot be operated, labour cannot be hired. So if the low price continues long enough, the reverse tendency begins to show itself in reduced production, not on account of unwillingness of the farmers to produce, but on account of inability to do so, which is a very different thing. I think we are approaching that period, and I would look for greatly enhanced prices for agricultural products, but unfortunately not accompanied by increased purchasing power. So that the high prices which some of our friends, whom you all can think of, so greatly desire, will not usher in the economic millenium. We shall have high prices and low purchasing power, and people crying out not because they cannot pay their mortgages but because they cannot pay their current bills. In other words, the burden will be shifted from one shoulder to the other, but it still will have to be carried.

*By Hon. Mr. Gillis:*

Q. That is rather a blue outlook.—A. I do not know.

Q. You think that the Western farmer will, by reason of the low prices, naturally reduce his production?—A. I said that there is a tendency that way, which I think will be fairly manifest this summer. But I think that the increase in prices will come soon enough so that it will not go very far, but there will be a tendency that way.

Q. So that it may not become necessary to compel the farmers of the West to reduce their acreage by fifteen per cent?—A. I certainly hope they will not be asked to do anything so ridiculous. It is a very interesting subject, but I think you would prefer to have me deal with dairying.

*By Hon. Mr. Buchanan:*

Q. In answer to a question by Senator Pope, you said that if you were farther away from transportation you would probably consider using milk for feeding hogs?—A. Absolutely.

Q. Is there a tendency now, on account of the better price for hogs, to abandon dairying and turn to the raising of hogs?—A. Yes.

Q. Is it noticeable?—A. Yes, in the eastern townships. Of course, practically speaking, they have no hogs there, but they feel that if they did have them they would be making more money, and that cheers them up immensely. A man's neighbour will possibly drive down the road with a few hogs and come back with \$150 and this man will say to himself, "If I had kept those hogs I had, I could have got as much money as that now." He is not blaming the Government or any other outside sources for his present situation; he simply sees that if he had kept his hogs he would have been better off, and as I say, that cheers him up a lot.

Q. Say that we were able to extend the market for hogs in Great Britain, would that have any effect on milk?—A. It would relieve the pressure on the fluid milk market in Montreal, but it would not lessen the production as a whole.

Hon. Mr. HORNER: Mr. Robinson said a few moments ago that a farmer kept no track of what he received for his dairy products. My experience in Eastern and Western Canada has been that dairying is a side line with most farmers. I remember that in 1900 we sold milk as low as fifty cents per hundred pounds. The milking was done night and morning, and it at least was a good method of training us young fellows to work. The situation in New Zealand is entirely different, where the farmer specializes in dairying, or in other branches, as the case may be. But in Canada, as I say, the farmer keeps a number of cows, and the chores are done by himself or his son as a side line.

Mr. ROBINSON: I would like to register my conviction that farming is not primarily a business, it is a way of life. No amount of bookkeeping, no matter how intricate, will suffice to show in the sense that the manufacturer can show, what it costs to produce certain forms of commodities, and no amount of book-keeping will justify certain practices which might appear profitable on the books, nor suffice to cause the farmer to abandon certain other practices which might show a loss.

*By Hon. Mr. Horner:*

Q. And on no two farms would the cost of producing a commodity be the same, whether it be wheat, or any dairy product?—A. Hear, hear.

Hon. Mr. BURNS: I agree with what Senator Horner has said. The labour connected with dairying that is carried on in a small way by the average farmer, does not cost him anything, and the money he gets from the sale of dairy products keeps the ball rolling.

*By the Chairman:*

Q. You speak of keeping dairy cows. Have you had any experience in keeping Holsteins or Ayrshires?—A. No, sir. I believe them to be not only equally well suited, but better suited to certain conditions. I believe Jerseys to be particularly well suited to my conditions. That is why I keep them.

*By Hon. Mr. Burns:*

Q. They are small milkers?—A. It depends on whether you get the price for the milk or not. The chief reason I keep Jerseys is that under our conditions in the Eastern Townships we never have a surplus of roughage; it is generally a question of a deficiency, and we must have a cow from which we can make the maximum possible out of each fork of hay. If I lived in Western Ontario, for instance, where there may be large surpluses of grain, hay and straw, in excess of the normal feeding capacity of the number of cows that a man generally keeps, then I would naturally keep a breed that consumed more rather than less.

Q. You cut up this straw, do you?—A. Cut it up, and use it for bedding.

*By Hon. Mr. Pope:*

Q. Have you a silo?—A. Yes, sir.

Q. What do you put in it?—A. Anything—corn, O.P.B., sunflowers, clover—any old thing at all.

*By Hon. Mr. Horner:*

Q. Have you any suggestion to make as to the method of improving conditions in the dairy industry?—A. Only such as would apply to the whole of agriculture. I did say, and I still think, it may be necessary to extend the principle of milk utility control boards to some of the cities in the East, with

certain safeguards. Aside from that the troubles that beset the dairy industry beset the agricultural industry as a whole, and I see very few signs that the nature of those troubles is being recognized, or that adequate steps are being taken towards betterment. Given time they will automatically be corrected, but they might be corrected with comfort and profit to all concerned within a few years.

Q. Do you not think that possibly we are working towards a condition where even production and sale and competition will have to be supervised? We may not like Government interference, but it may be absolutely necessary.—A. I am afraid it may be so. If so, conditions will break down, and we will proceed with the inevitable adjustment after a still more painful interlude. I should regret to see it very much.

Q. So should I, but it looks as if it might be necessary in regard to the raising of wheat and hogs. If we were to rush into hog production we would have more hogs than there would be any market for.—A. Quite; then we would rush out again.

*By Hon. Mr. Gillis:*

Q. That would increase the cost of milk and cream?—A. Perhaps it would not be as costly as the supervision would be.

*By Hon. Mr. Horner:*

Q. Are they not getting along with supervision in regard to hogs in Denmark?—A. Yes. They were close to an available market, and were astute enough to be the first in it, and to use every means open to an intelligent people. Now they find themselves in almost as great economic difficulties as we do, and further planning on their part will not avail to keep the market they now have, much less to increase it.

Q. But naturally they have a small acreage of land per farmer. In Canada we have every natural advantage, and an immense wealth of land. There they have to tether their cattle with chains to keep them from tramping the pasture. They have a strict code with regard to the selling of hogs. Each farmer can sell only so many, I understand.

Hon. Mr. BURNS: That is of late years only.

The WITNESS: If you replace in the statement which you make the word "necessary" with the word "probable" I will subscribe to it. You said a further extension of control was necessary. I say it is probable. I do not say it is necessary.

*By Hon. Mr. Horner:*

Q. You don't believe it is necessary?—A. No, sir. I believe we will get into a tenfold worse jam than we are in now by trying. I believe markets and prices are there. You cannot make either, but you can use both.

*By Hon. Mr. Horner:*

Q. Take two men in the manufacturing industry: they may have to curtail or get together. Two farmers similarly situated each have an equal right to produce a certain number of cows and sell the milk. One man goes in and hogs the whole proposition. All the other farmers are entitled to make a living, but if they all go in together they would ruin the market, and eventually have a production for which there was no consumption. That is why I ask if you do not think it may be necessary.—A. No, I do not think so, sir. I think that goes back to the question of opinion as to whether there is or is not world over-production of food stuffs.



Q. Then, do you not think that modern methods of producing food stuffs enter into the picture? For instance, milking machines, and harvesting combines. We have all the difference between the cradle and the flail and modern machinery in handling our grain?—A. I can only suggest that we are not as long a distance from the cradle and the flail as we were three years ago. We have moved back towards that condition a considerable distance, and we are likely to move back further yet. I think the mechanization of agriculture has had a great effect, but I think it is greatly exaggerated. The vast bulk of the world's food stuffs continues to be produced without mechanization.

*By Hon. Mr. Gillis:*

Q. You can suggest nothing, Mr. Robinson, to improve conditions all over the country?—A. I am afraid this Committee will consider I am desperately reactionary and old fashioned when I say I do not think there is very much we can do. We shall have to tinker with the old machine so it does not grind its gears too badly until it can re-adjust itself. There is not very much to be done other than to recognize the fundamental nature of our present troubles, of which I see very few signs. A recognition of that would do wonders towards rehabilitating the machine.

*By Hon. Mr. Burns:*

Q. What do you think about milking machines?—A. I use machine-milking, Senator Burns, because in my particular type of organization I have no use for the extra hired labour which I would have to have to milk the cows by hand. If I had any use either profitably or with an even break for the extra labour, I would abandon machine-milking to-morrow, because I prefer hand milking, but I should have to keep three or four more men and I would have no other work for them to do.

Q. Don't you think machine milking hurts the cows?—A. No, sir.

*By Hon. Mr. Gillis:*

Q. Does it affect the flow of milk?—A. No. I do think that a cow can be kept to a higher production standard throughout the year by the best hand milking; but if you take a succession of hired men to replace one another—a condition which you have to face on the farm to-day—then I prefer machine-milking. That is why I have it.

Q. If you could get men who understand the work you would prefer hand milking?—A. Yes, at once.

The CHAIRMAN: I gather from your remarks, Mr. Robinson, that you are not particularly favourable to too much paternalism; you are inclined to let the individual rely on himself to work out his problems rather than have the Government do anything for him?

The WITNESS: I am afraid the individual will have to exercise rather more intelligence if the Government interieres with him than he does now when relying on himself.

May I register another opinion, Mr. Chairman?

The CHAIRMAN: Yes.

The WITNESS: Before the Committee adjourns, Mr. Chairman, I should like to register my opinion that the fundamental factor which has brought about the unhappy condition we are now in is an over-growth or an over-development of urban life at the expense of rural life. The cities are too large, too expensive, too high living to be carried and supported by the countryside as they are now.

Henry Ford says history is bunk. I do not think so. If history teaches any lesson at all in the last two thousand years, it is that every time cities

continue for too great a number of years to offer a return to capital and labour largely in excess of that which capital and labour can obtain in the country, they end by attracting into themselves so much capital and so much labour that the result can no longer be supported by the countryside in its depleted condition.

Now, that state of affairs has arisen through the operations of the so-called industrial revolution for the last hundred years. It has reached its climax now; we are in it. As I see it, it will infallibly remedy itself, the balance will be restored. If I read history aright, when similar conditions have arisen the balance has been restored in one of two ways: either there has been a sharp shrinkage in the population, wealth and activities of the cities until they were small enough, poor enough and cheap enough, so that the countryside could carry them; or there has been an expansion and an increase of the profitability and activity in the country until the foundation under those cities extended itself to such a dimension that it could carry the cities which were too big for it before; or more likely a little of both.

May I point out to you gentlemen that at the end of the Napoleonic wars the English manufacturing cities found themselves in just exactly the sort of jam that we are in to-day—thousands of unemployed, closed factories, budgets that could not be balanced, bread lines, complaints from the country, surpluses of wheat and of everything else. That condition remedied itself and changed into a marvellous era of prosperity, much of which Senator Burns can remember. It remedied itself without any collapse of the English cities because there opened up just at that crucial moment the vacant land of North America, which was developed on an unparalleled scale and with great rapidity.

May I point out further that that development promptly increased the very production of food stuffs which every economist of that era thought was already too great—an increase so manifold that it was not valued at all until the cities again got themselves anew into a jam similar to that which I have just outlined.

Now then, if you gentlemen can see any similar opportunity for expansion of rural life to carry the present cities of the Western world, why, I should be delighted. There are opportunities, but I do not think they in any sense parallel the settlement of Kansas and Saskatchewan. In other words, the adjustment, if it is to be an upward adjustment on the part of rural life, is going to be very much more difficult than it was then. If they had been confronted by tariffs or otherwise to England, the small area of rural life there could never have extended sufficiently to carry those young and growing manufacturing cities, and they would have had a collapse then. They did not collapse because their markets extended to the shores of the Pacific Ocean and did not stop within the shires of England.

I think we can do something towards intensifying and reviving rural life in the Western world, and so save the major part of the urban development which we have; but I am inclined to say, in answer to a thought which was implicit in one of your former remarks, that we probably cannot save it all, and that in the next ten years there is likely to be a considerable shrinkage of wealth and population in a number of the larger cities of the Western world before the balance can be restored. That is the only way the unemployed will ever be put to work.

Many or all of you gentlemen will not agree with my analysis of the situation, but I just wanted to put it on record.

Hon. Mr. HORNER: Mr. Chairman, I entirely agree with Mr. Robinson, and I should like to see his remarks given full publicity, especially in our Western newspapers.

The WITNESS: With your permission, sir, I should like to read into the record a paragraph from old Adam Smith's *Wealth of Nations*, a book written

160 years ago. I am quoting from the chapter on wages and profit. Referring to the dealings of the cities with the surrounding countryside, he said:

In these latter dealings consists the whole trade which supports and enriches every town.

Every town draws its whole subsistence, and all the materials of its industry, from the country. It pays for these chiefly in two ways: first, by sending back to the country a part of those materials wrought up and manufactured; in which case their price is augmented by the wages of the workmen, and the profits of their masters or immediate employers: secondly, by sending to it a part both of the rude and manufactured produce, either of other countries, or of distant parts of the same country, imported into the town; in which case too the original price of those goods is augmented by the wages of the carriers or sailors, and by the profits of the merchants who employ them. In what is gained upon the first of those two branches of commerce, consists the advantage which the town makes by its manufactures; in what is gained upon the second, the advantage of its inland and foreign trade. The wages of the workmen, and the profits of their different employers, make up the whole of what is gained upon both. Whatever regulations, therefore, tend to increase those wages and profits beyond what they otherwise would be, . . .

The N.R.A.; for example.

tend to enable the town to purchase, with a smaller quantity of its labour, the produce of a greater quantity of the labour of the country. They give the traders and artificers in the town an advantage over the landlords, farmers, and labourers in the country, and break down that natural equality which would otherwise take place in the commerce which is carried on between them. The whole annual produce of the labour of the society is annually divided between those two different sets of people. . . .

That is, urban and rural.

By means of those regulations a greater share of it is given to the inhabitants of the town than would otherwise fall to them; and a loss to those of the country.

The price which the town really pays for the provisions and materials annually imported into it, is the quantity of manufactures and other goods annually exported from it. The dearer the latter are sold, the cheaper the former are bought. The industry of the town becomes more, and that of the country less advantageous.

Well, having continued to make the industry of the town more and that of the country less advantageous for the last one hundred years, we have now got the town so big and expensive that the countryside can no longer maintain it. Until we rectify that situation, all the tinkering we can do with the countryside will be of no benefit whatsoever. However, I am optimistic enough to believe that the present unbalanced state of affairs will correct itself. But I should like to see, in this country at least, that correction made with a little effort, a little intelligence and a little patience, and not with a lot of tears and a little blood which it certainly will be made with if we go on failing to recognize the fundamental cause of the problem we are trying to solve.

The CHAIRMAN: I think we have had a very interesting morning. Mr. Robinson has given us a lot of useful information, and on behalf of the Committee I wish to thank him.

The Committee adjourned, to resume at the call of the Chair.







SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND REPORT

No. 2

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TUESDAY, MARCH 20, 1934  
THURSDAY, MARCH 22, 1934

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Reference—Hog Grading  
(also Report on Bill No. 26, an Act respecting Fruit)

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WITNESS:

Mr. L. W. Pearsall (Assistant Chief of Marketing Division), Department of Agriculture.

Appendix C—Capita consumption of meats, 1924-1933.

Appendix D—Average prices of Hogs sold at stock yards throughout Canada, 1923-1933.

OTTAWA  
J. O. PATENAUDE  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1934





## REPORTS TO THE HOUSE

### SECOND REPORT

TUESDAY, March 20th, 1934.

The Select Standing Committee on Agriculture and Colonization beg leave to submit the following as a

### SECOND REPORT

Your committee has duly considered Bill No. 26, an Act respecting Fruit, and has agreed to report the said Bill without amendments.

All of which is respectfully submitted.

M. C. SENN,  
*Chairman.*





## MINUTES OF PROCEEDINGS

THURSDAY, March 20, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon.

Mr. SENN (the Chairman) presiding.

The following Members were present: Messieurs Barber, Bertrand, Bowen, Boyes, Brown, Butcher, Carmichael, Fafard, Gobeil, Golding, Hall, Loucks, Lucas, McGillis, McKenzie (*Assiniboia*), Motherwell, Myers, Pickel, Porteous, Senn, Shaver, Simpson, (*Simcoe North*), Smith (*Victoria-Carleton*), Spotten, Sproule, Stewart (*Lethbridge*), Sterling, Sutherland, Swanston, Taylor, Thompson, (*Lanark*), Tummon, Weese, Weir (*MacDonald*) and the Honourable Mr. Weir, Minister of Agriculture—35.

Officers of the Department of Agriculture in attendance: Dr. McMillan, Fruit Commissioner; The Dominion Apiarist, Mr. Gooderham.

The Committee proceeded to the consideration of Bill No. 26 an Act respecting fruit. And agreed to report same to the House without amendment. At 1 o'clock the Committee adjourned to meet again at the call of the Chair.

WALTER HILL,  
*Clerk of the Committee.*

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THURSDAY, March 22, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon. The Chairman, Mr. Senn, having to attend the Special Committee of the House on Price Spreads, the chair was taken by Mr. F. Shaver (*Stormont*).

The Acting Chairman read a letter addressed to Mr. Senn from Mr. L. S. Pearsall correcting a statement he made to the Committee at a meeting held on March 13.

The following Members were present: Messieurs Barber, Bertrand, Blair, Bowen, Boyes, Butcher, Carmichael, Fafard, Gobeil, Hall, Lucas, McKenzie, (*Assiniboia*), Moore (*Chateauguay Huntington*), Mullins, Pickle, Porteous, Senn, Simpson (*Simcoe North*), Smith (*Victoria-Carleton*), Stewart (*Lethbridge*), Sterling, Taylor, Totzke, Tummon, Weese, Weir (*MacDonald*). The Honourable Mr. Weir, Minister of Agriculture—(29).

Mr. L. S. Pearsall, Assistant Chief of the Marketing Division, Department of Agriculture, was called to continue his evidence on the question of Hog Grading.

The witness filed tables showing the increased capita consumption of meats since the grading of meats has been in effect.

Also average prices of hogs sold at stockyards throughout Canada 1923-1933.

The Committee then adjourned to meet again at the call of the Chair.

WALTER HILL,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

March 22, 1934.

The select standing committee on agriculture met at 11 o'clock, Mr. Shaver, acting chairman, presiding.

The CHAIRMAN: I understand that Mr. Pearsall is to make a further statement in connection with hog grading this morning. There are two statements filed concerning the average hog prices and the average price of hogs sold at stockyards throughout Canada in 1923 and 1933.

The WITNESS: Mr. Chairman, Hon. Mr. Weir, and gentlemen: I should prefer if the discussion this morning was more or less in the nature of questioning. I have further information with respect to what we have done towards rail grading. At the last meeting there was filed an amendment to the regulations permitting of rail grading on a voluntary basis. That step we have taken to permit of experimental work to find out just whether we can do this job and how it can be done. During the past number of years, while we have been grading hogs alive, other countries, Denmark, then Sweden and then Holland have already established, and are operating on a rail graded basis. Only recently Great Britain took the same step, and last fall introduced rail grades made effective in respect to hogs that are used in the bacon industry in Great Britain. There are two distinct types of pork trade—the fresh pork trade and what goes into the bacon cure; and the regulations to the rail grading established in Great Britain only cover pork that goes into the bacon trade. They have established A, B, C, D and E grades in their classification, divided into class 1, 2, 3 and 4 according to the weight ranges within those qualities, and there are definite fat measurements, definite measurements for the length of the carcass and balance of the carcass stipulated in reference to these various grades. That is similar to the grades in other countries—Denmark, Sweden and Holland. Therefore, we have been trying to determine if we can establish a similar system in Canada, believing it is a more efficient system of grading hogs.

As I intimated last week, our main problems were mechanical. The first thing was identification. Other countries identify with ear tags. We have been unable, until recently, to get an ear tag that will stay in the hog's ear during the period of slaughter. Just to give you some idea of the problem, here is a brief summary of the different types of machines in different plants. Various types of Beaters: All Bright Nell machine, Kramer machine, Baby Boss, Boss U machine, Perrin machine, Anco Beater. That is not the whole problem. Take the same type of machine operating at different spots. Here is a Boss U beater that operates at a speed of 155 r.p.m. and another one at 94 r.p.m.

*By Mr. Totzke:*

Q. The tag was torn out with a piece of the ear?—A. Yes. The whole ear where the tag was fastened was torn out, but we have that problem fairly well solved. There was another mechanical problem, the matter of weighing the carcass. As they pass along the rail these carcasses are now weighed in actual plant operation, but it is only for the purpose of getting the dressing percentage on each carload. In checking these weights we found they were not accurate; the weights would vary from five to ten pounds, and we have been experimenting to find a correct method of weighing; we now have a scale that will register the



weight and print this weight on the tags, and we believe it to be sufficiently accurate for this purpose. It will mean that in certain plants such as two plants in Toronto, one in Winnipeg and one in Calgary that operate at such a high speed as to require two scales; and divide the rail to do this job; but in the case of any plant operating under 300 hogs per hour one scale is sufficient. Over that speed; to get accurate weights it will require two scales. These are some of the mechanical problems we have been working out for the past three or four years.

Our present live grades are not adaptable to rail grading. At least we feel that they can be improved on, and so we have been experimenting and testing slaughtered hogs to find just what might be suitable grades. I would like to review some of this information. Here is a kill of 4,015 hogs representing a week's kill at one plant. These are northwestern Ontario hogs mainly, but included in this kill are nine carloads of southwestern Ontario hogs. The standard of grades used were three grades of bacon. You may call them 1, 2 and 3, or lean, leanest and prime. We are trying to make them comparable to the standard of grades set up for export bacon which I mentioned to you last week. We have our standards for export bacon, and in those standards are three bacon grades with different weight ranges of 50 to 55 lb Wilt-shires—56 to 60 lb, 61 to 65 lb and 66 to 70 lb.

There are the three selections, number 1 selection, number 2 selection and number 3 selection. Those are the grades for export bacon, and we have endeavoured to set up grades for rail grading that would be comparable to these grades. Therefore, we have number 1, number 2 and number 3 bacon.

Mr. TOTZKE: Would the witness explain the purpose of these machines?

The WITNESS: They are for cleaning the hog, taking off the hair and cleaning the hog. After the hog is scalded they go through these machines. The majority of beaters revolve at various rates of speed, and during this process the hog is thoroughly cleaned and the hair is taken off. It is during this process that the ear tags are lost, and that is our difficulty. I am citing these problems to show the variety of conditions we are up against. One tag will come through one plant with a certain type of machine and in another plant the machine might revolve at double the speed and the tag would be torn out. For the purpose of identifying we are working on two angles—one is the tattoo and another is the ear tag. We developed the tattoo perfectly satisfactorily, but we did not consider it would be efficient under country conditions, loading hogs in bad weather, because the ink might freeze and so forth; while it was perfectly satisfactory under controlled conditions we did not feel it would be satisfactory for general trade practice. Therefore, we returned to the tag idea to develop a tag that should stay in the ear. We have solved this problem not so much with changing the tag as correcting the operation of the plants. To give you an example: one plant that we were experimenting in was losing an average of 43 per cent of the tags. We put a mechanic in the plant and he watched the hogs going through and noted where the tags were being torn off. The next week by making slight alterations in the mechanics of the beater and by making certain mechanical corrections we cut our loss of tags down to 2 per cent in a week, and to-day we feel that we have solved the matter of identification.

Mr. LUCAS: What are our difficulties here in Canada in dealing with this question as compared with those, say, of Denmark and Holland?

WITNESS: Their plants operate at a very slow speed, as compared with Canadian plants.

*By Mr. Totzke:*

Q. Has not the distance from the abattoirs in our country something to do with it too?—A. We have a problem there in regard to settlement—to getting the settlement back—but as far as the tag itself is concerned the distance should be no factor.

Q. My idea was that that was a deterrent to the use of the rail grade system?—A. It is. For instance, take the case of hogs loaded in Alberta and going through to Montreal in some cases, probably, stopping at Winnipeg, where half a car lot is sold and the balance goes on to Montreal. That presents a problem.

*By Mr. Pickel:*

Q. What was the trouble with the ear tags; were they torn out?—A. Are you referring to the Danish tag?

Q. Our tags?—A. They would tear the ear right out. The tag itself would stay clinched.

To continue with carcass standards; we have made two other grades for pork that is not suitable for export; and what we will call pork carcasses which will come into the domestic trade.

We have these five grades—three grades of bacon and two grades of pork—and these are divided into the various weight ranges: 120 lbs. to 130 lbs., 131 lbs. to 140 lbs., 140 lbs. to 165 lbs., and so on. Those weights are comparable to our Wiltshire selections of 60 lbs. to 65 lbs., etc.

Returning to this kill of 4,015 hogs. As I described, they are Central Ontario selection except for the nine car lots that were from southwestern Ontario. Sixty-two per cent of those carcasses went into our Wiltshire grades of 1, 2, and 3, and 33 per cent of this kill were classified into the pork grade. That hardly gives you the whole picture, because there were 6 per cent of those that were light and 3.3 per cent that were heavy, which would bring your percentage of carcasses graded according to type into pork down to about 28 per cent.

Here is a carload of western Canada hogs. There were 49 per cent in the bacon grades and 41 per cent went into pork. I might say that was a fairly good load of western Canada hogs.

Here is probably a more representative group of 445 western Canada hogs, and only 29 per cent of those went into the three top grades of bacon and 64 per cent were graded into pork.

*By Mr. Totzke:*

Q. What was the reason for the 64 per cent; were they heavies or lights?—A. No, very largely type. In this particular kill 70 were light hogs; under 120-pound carcasses, and eight were heavies. That would mean that the balance were graded for type and finish.

Q. Because they were not of the bacon type?—A. Yes. Because they were not of the bacon type. Here is a kill of 1,260 hogs. Seventy-one per cent of these hogs graded in the bacon grade. These were Ontario hogs, including five loads of southwestern Ontario hogs, and 71 per cent went into the three grades of bacon. As I described, however, there are five different weight ranges. The product that is most desirable to ship is 55 to 65-pound Wiltshire, and out of those 1,260 hogs there were only 28 per cent that qualified within those weights, although they were the right type, properly finished, good carcasses. They were light weights between 120 and 130, or heavy, weighing 176 and 185—either too heavy or too light. They were a suitable type with desirable conformation and properly finished, still they would sell for a discount on account of their weight when shipped overseas.

*By Mr. Smith:*

Q. What steps is the department taking to get a larger percentage of these hogs into the bacon types?—A. Do you mean in the way of field work?

Q. Yes?—A. We have a number of policies that our graders are devoting a considerable part of their time to, starting at the foundation, and we have an advanced register policy which is similar to the testing stations that they have

in Denmark and Sweden. This policy provides a test for pure bred stock. Four pigs are slaughtered from a litter. A record is kept of the time they are on feed, and the carcasses when slaughtered are cut and scored according to balance and evenness of fleshing, with the idea of measuring the utility value of this stock; the maturity index or thrift, and the utility value of the carcasses. That is the foundation of all our work. In addition we have feeding competitions—what are known as bacon litter competition for commercial swine men, and they have made some remarkable records.

Q. What progress has been made from year to year along that line? Can you give us a comparison of the years?—A. You mean the improvement?

Q. What progress has been made in getting a better type of bacon hog on the market?—A. The final analysis of result of these policies is indicated in the grading percentage submitted last week. That is the only way you can measure the improvement that has taken place.

*By Mr. Totzke:*

Q. We export nothing but the bacon type of carcass, do we? Do any of the pork grades go to export at all?—A. Yes, at certain times, as I described last week, there are times when the packer must export lower grades to get sufficient volume when there is not enough good selection.

Q. There is not as much demand for the pork grades as bacon?—A. Lower grades suffer a severe discount on the British market. Last year the price ranged between the best Canadian and the poorest Canadian was as much as ten to twelve shillings for certain weeks owing to the lower grade quality shipped.

Q. With regard to our domestic market, would it absorb more of the bacon type than the ordinary pork type?—A. The bacon type hog is just as suitable, and probably more suitable for 90 per cent of our domestic trade as any other type of hog. As a matter of fact, a larger number of the smaller packers which are doing nothing but a domestic business, are buying the best hogs. When I say the best hogs I mean the bacon type hog. It is true that there is a limited market for what we call shop hogs or lightweight butchers, let me say, at both extremes of the Dominion, Vancouver and Montreal.

*By Mr. Boyes:*

Q. That would be consumed chiefly as fresh meat?—A. Yes, the shop hog trade.

*By Mr. Totzke:*

Q. Would they go into sausages too?—A. No. They are just sold as carcasses. They are not even scored. They are about 100 to 120 pound lightweight carcasses and they go into the butcher shop and the butcher cuts them up himself.

*By Mr. Lucas:*

Q. You have set up an export standard, have you not?—A. Yes.

MR. LUCAS: Will that export standard allow the shippers to delve down and take this poor class of pork and ship it overseas?

THE WITNESS: At the present time there is nothing to prohibit the packer digging down, as you say, and exporting a poor quality of pork.

MR. PICKEL: Do they not get any bacon at all out of the butchers?

THE WITNESS: Yes; they ship it overseas, as I described.

MR. PICKEL: Why is it that in Montreal they often refuse to buy the selects unless they get the whole bunch of undergrades too?

THE WITNESS: I cannot answer that question sir.

HON. MR. WEIR: What was the question?



*By Mr. Pickel:*

Q. That would be the practice of the trade?—A. The answer to it is this: It is not a definite policy of the trade, but a plant is looking for volume as well as quality. They want selection, but if they do not get these hogs somebody else will, and volume is of just as much importance to a packing plant as selection.

Q. Do they not get Cumberland cuts from these undergrades?—A. Yes, they could make a certain amount of Cumberlands, providing they are the proper weights, but there is very little Cumberland trade.

Q. What about hams?—A. Hams, yes; but here is your problem: If you ship a volume of hams you are left with the rest of the carcass to sell locally, and you make a condition in the market of being short on hams, and your prices will be out of relation to the rest of your pork cuts; therefore, you cannot build a trade on ham trade alone. The value of the Wiltshire trade is that the shippers sell the whole hog at one operation; whereas if you ship Cumberlands you get the front quarter left; if you ship hams you have the middle and the front quarter left. As a matter of fact the Cumberland trade is a very very small trade to-day. In so far as the Cumberland trade is concerned, there used to be a fair volume from western Canada.

Q. What is the differential between the Cumberland and the select bacon sides on the British market?—A. That varies. For instance, our bacon prices last year. For our Wiltshires alone, the high and the low, the price for our poorest and the price for our best quality would narrow down at certain times to four shillings, and other times twelve shillings.

Q. How would the Cumberland compare with the lowest grade of selects? Would it not demand just about an equal price?—A. Yes, at times they did; but there is a very limited market for Cumberlands. On the other hand, the packer is left with a portion of the carcass that he has to sell to the domestic trade. The ham trade is more or less used when it is opportune, and the price is right in the Old Country, so that they can sell to advantage.

*By Mr. Mullins:*

Q. Why did they refuse select hogs last week in Montreal? I understand that the selects were put in a pen. Why did the packer refuse them?—A. The packer did not refuse to buy hogs, sir, last week.

Q. Have I been misinformed?—A. The fact of the matter is that the buyer bid \$9.65 on the hogs. There were certain hogs that moved in the market last week at 9½ cents with discounts on the lights and heavies; no discounts on the butchers, and a premium on the selects. The packers bid \$9.65 for bacons with a premium on selects and discount on butcher grade, and the trade refused to sell at that differential. The hogs did not move off the market, but that was the packers' offer on the hogs.

Q. I am given to understand there were a large number of hogs in Montreal, but unless the packer got the cut-backs, he would not buy the selects?—A. The packer bought selects and bacons this week, and he bought butchers separately.

Q. But he refused last week?—A. He refused last week.

Q. He refused to buy them unless he got the cut-backs?—A. The trade would not sell them any other way sir. They refused to sell the hogs at any price.

Q. They did not refuse to sell the selects??—A. They had a standing offer for the day at that price, \$9.65; therefore I cannot see how you can state that the packer refused to buy them.

Q. I am informed that that is the fact, and I think Dr. Pickel knows about the same conditions, that on that day they refused to buy the select hog without getting the cut-backs?—A. That may be true. Sometimes that does happen; as I explained, it might be a matter of volume.

*By Mr. Lucas:*

Q. Coming back to the export standard, does the export standard at the present time permit a packer to ship inferior grades?—A. Yes, those can be shipped.

Q. Do you think there should be a remedy there; do you think there should be a standard set under which they could not ship?—A. Yes, absolutely, if we had a sufficient volume of good hogs to satisfy our exports. Until we can get enough good hogs to satisfy the exports, that cannot be done. For instance—I mentioned this last week—all the select hogs marketed in Canada totalled about 522,000. A lot of these select hogs went into small plants in the domestic trade. These plants are not under inspection, and they are not available for export. Offhand, I would say that 25 per cent of those select hogs slaughtered in such plants were not available for export.

*By Mr. Totzke:*

Q. You say that there are a number of plants that are not under inspection?—A. Yes.

Q. Not under any inspection at all?—A. Not so far as health is concerned.

Q. Grading?—A. Yes, grading; but I am talking of a federal inspection for health. A plant cannot export any meat, even from one province to another, unless there is a health inspection.

*By Mr. Pickel:*

Q. The mere fact that you are exporting these undergrades does not have any reflection on our selects. Does that tend to depress the price, the shipping of those under the right grade?—A. I do not understand your question.

Q. I mean, does it not have a tendency to depress the price. The fact that we are shipping inferior grades does not tend to depress the price?—A. Yes, I think it does. We should not be shipping inferior grades.

Q. We cannot ship all selects?—A. We should have enough good hogs to satisfy the trade.

*By Mr. Carmichael:*

Q. Is not the shipping of inferior Canadian products into the British market likely to prejudice our position more and more?—A. I quite agree with you that we should be shipping nothing but No. 1 and No. 2 bacon overseas. I quite agree with that. I thought I had some figures of our monthly exports for last year, but I do not see them here. The point is this: If the packer is limited, and you say he cannot ship anything but No. 1 and No. 2 and we have an excess over our domestic requirements, then the poor quality is left on our own market. It is just a question of whether shipping the lower quality for even a lower price to clear our domestic market is of more value than saying it cannot be exported.

Q. Is not the education of the Canadian producer very important, too? So long as he can get rid of the inferior type of hog he is going to continue to grow them. If there was more disparity and he came to realize that it was a matter of dollars and cents, he would get into the better type hog much quicker?—A. There is a difference in the price. Just because it is exported does not mean that it is not bought at a cheaper price.

Q. If it were prohibited to export any of the inferior quality, it would depress the price to a greater extent, would it not?—A. It would depress the price on the domestic market.

Q. That would come back home to the producer and impress him quicker than probably anything else?—A. I quite agree with the principle that the establishing of our position, both with respect to quality and quantity, particularly quality, on the British market, is of vital importance.

Q. Do you know what the Denmark situation is along that line?—A. Very good. They are in a very favourable position. They have been working on this market for years. Their product is very excellent. We have a long way to go before we reach their standard.

Mr. WEIR (*Macdonald*): Their standard is much stricter.

The WITNESS: The best of our hogs are as good as the Danes'; but when you start to get volume, that is where we lag behind.

*By Mr. Totzke:*

Q. It is not only the quality of our product in regard to the British market, but is it not also the continuity of supply?—A. Yes, you have another problem in speaking of the matter of what you shall ship. We have a quota, 280,000,000 pounds, for a five-year period. What Britain is actually doing is regulating her marketing, or just turning a tap so as to regulate supplies and keep prices at an even level. Every other country is strictly on a quota. They know exactly how much bacon is coming in from Denmark and other countries.

*By Mr. Mullins:*

Q. This figure is not what the British market will take?—A. We have an unlimited supply. We can ship as much as we like up to 280,000,000.

*By Mr. Totzke:*

Q. We can ship more than we can supply?—A. We only shipped 25 per cent of our volume last year. If we this year ship much more—we shipped last year 75,000,000 pounds—

*By Mr. Pickel:*

Q. Did we ship 75,000,000 pounds?—A. Approximately 75,000,000 pounds. Our quota next year is going to be about on the same basis. If we demonstrate during five years we can only ship 40,000,000 to 50,000,000 pounds of bacon, that is about the quota we are going to get on any new negotiations that are negotiated. Therefore the importance of shipping on a volume basis as well as a quality basis. That is the point I am trying to emphasize.

*By Hon. Mr. Motherwell:*

Q. You think the quota is liable to be reduced before the end of five years if we do not move our numbers up?

Mr. BOYES: There is a question at this particular time as to whether it would not pay us to allow some of the cheaper grade of pork to go in, in order to keep up the quota?

WITNESS: That is just the point I am raising with this gentleman, although in principle I can agree with him, that we should ship nothing but good quality, yet we should have enough good quality to supply that market.

*By Mr. Totzke:*

Q. The thing is general throughout Canada. The type of hog raised throughout Canada is the bacon type. There is no particular demand for any other type in Canada?—A. Coming back to that point about the domestic market, I would just like to make this clear: There is a limited market for what you might call a shop hog, a good lightweight hog; but if our hogs are all good bacon type hogs, we have no alternative market. We are then always in a position to export if we need to, or if we have the opportunity; and that type of hog is also the best hog for our domestic market. We have two bids every time, whereas if our hogs are not suitable for export when the opportunity presents itself, we are not in a position to avail ourselves of the market. That is the foundation upon which we are building.



Q. Then we should endeavour by education to raise a bacon type?—A. That is what we have been endeavouring to do as far as possible.

*By Hon. Mr. Motherwell:*

Q. The Canadian demand for bacon is of practically the same nature as the British demand; the demand is for about the same quality?—A. Ninety per cent, yes.

Q. In other words, we appreciate good bacon as well as they do and are ready to pay for it?—A. Yes.

*By Mr. Porteous:*

Q. In endeavouring to educate our people to raise a better type of hog, you say we have a long way to go before we raise a hog that will equal the Danish hog. How long do we think it would take us before we can overtake them, ten years?—A. We have made some remarkable progress in the last ten years. Take for instance, Ontario: the packing plants in Ontario in January and February of this year show select hogs amounted to 27·5 per cent, with a volume of 71,000 hogs approximately. There was only 8 per cent butchers, ·9 per cent heavies and 4 per cent lights. Or in other words, all the hogs were in the two desirable grades, bacons and selects, except for about 13 per cent. When you move to Western Canada, I agree that looking at the figures you have a different picture; but you have different conditions. During the past three or four years, a lot of the farmers have turned from grain farming to hog raising. The hog production in Alberta increased about 400,000 in three years. That brought into the business of hog raising a number of farmers who were previously grain farmers. They started in this game with no experience in regard to feeding and good husbandry. Taking these factors into consideration, I think our progress has been satisfactory.

*By Mr. Gobeil:*

Q. Have you got the percentage of bacons and selects in the province of Quebec?—A. It is about nine per cent.

Q. And what is it in Ontario?—A. Twenty-seven for the hogs killed in Ontario. Of course, some Ontario hogs come to Montreal and are killed there. The figures I quoted you are for the hogs killed in Ontario.

Q. Do you not think that that is due to the lack of legislation in Quebec to enforce the regulations? Is that not the reason for the low percentage in Quebec?—A. I believe so. I am satisfied that is a fact.

Q. It is very important. Our percentage is so low that there must be some reason for it.—A. Take Eastern Ontario and Quebec, they are just as favourable to the production of hogs as any other part of Canada. As a matter of fact, they are ideally situated for the production of good hogs. They have the natural feeds; they have an abundance of dairy by-products which they have not got in Western Canada, and yet they have a very low grading.

Q. Has the Montreal market anything to do with it?—A. Yes, there is a certain local demand there that has an influence on it.

*By Mr. Tummon:*

Q. Have you not the figures by counties?—A. I beg your pardon?

Q. Have you not the figures by counties?—A. For Ontario, yes, I have the figures by counties.

Q. In furtherance of Mr. Gobeil's remarks, it would be very interesting to take the different counties in Ontario, moving to the Montreal market.

*By Mr. Gobeil:*

Q. Have you the answer to Mr. Tummon's question. The figures you have given for Quebec include what? Do they include hogs shipped from Ontario to the Montreal market?—A. No, the figures I gave you last week are for the hogs originating in Quebec.

*By Mr. Tummon:*

Q. Not on the Montreal market?—A. No; the Montreal market has hogs from western Canada. They get about 25 per cent of their hogs from western Canada, 62 per cent from Ontario, and the balance are Quebec hogs.

*By Mr. Boyes:*

Q. Did you say that 62 per cent of the hogs received on the Montreal market came from Ontario?—A. 62 per cent last year.

Q. 62 per cent of the kill came from Ontario?—A. Hogs on the stockyards; their total kill would be more than that.

*By Mr. Gobeil:*

Q. Have you the number of hogs in Quebec in relation to the number in Ontario? In Ontario you gave 71,000 selects; have you the numbers for Quebec?—A. No, but I can get it. I gave it to you for last year, but I have not got it just up to date. Take eastern Ontario, Dundas county. In 1923 they graded 18 per cent selects, in 1933 it had dropped to 9·5 per cent, and they reduced their production by 6,700 hogs. Only three counties in eastern Ontario increased their production. Here is the report. I shall not read the counties, but here are the drops: In 1923, 20 per cent, 1933, 7·4 per cent; 17·7 in 1923, 8·6 in 1933; 24·7 in 1923, 14·8 in 1933; 21·7 in 1923, 10·9 in 1933; 19·3 in 1923, 8·5 in 1933; 16·2 in 1923, 10·8 in 1933; 18·6 in 1923, 5·3 in 1933; 18·0 in 1923, 13·0 in 1933; 15·7 in 1923, 13·3 in 1933; 15·6 in 1923, 7·3 in 1933; 16·4 in 1923, 8·8 in 1933. That covers the counties of Dundas, Frontenac, Glengarry, Hastings, Lanark, Leeds, Lennox and Addington, Prescott, Prince Edward, Renfrew, Russell and Stormont, all in eastern Ontario.

Mr. TOTZKE: What do you think is the cause of that?

Mr. TUMMON: Does that cover Hastings?

The WITNESS: Yes, from 24·7 down to 14·8.

*By Mr. Weir (Macdonald):*

Q. You started grading in 1924?—A. We started grading in 1922. The production in 1923 was 52,000 odd hogs, and the production in 1933, 35,000 hogs.

*By Mr. Weese:*

Q. Have you the percentages for Prince Edward?—A. 18·0 down to 13·0. The production is up 1,243 hogs in that period.

Mr. BOYES: What about Middlesex?

The WITNESS: 17·8 per cent in 1923, and 24·4 in 1933, an increase of 7,210 hogs.

Mr. BOYES: An increase in what?

The WITNESS: In the production.

Mr. BOYES: What about the grades?

The WITNESS: They graded 17·8 per cent selects in 1923, and 24·4 in 1933, ten years after.

Mr. BERTRAND: The other day I think you made a remark to the effect that the low grade of hogs delivered to the market in Montreal, from the eastern part of Ontario and Quebec, was due to the lack of enabling legislation in the province of Quebec. I am probably not reporting you accurately, but that is the essence of what you said?—A. The essence of it is this, the trading method that has been practised on the Montreal market in my opinion has been largely the cause of lack of improvement and the reduction in production in this area. As I explained the other day, the farmer has no incentive to improve from the raising of low grade butcher hogs. He looks over the fence and sees the farmer on the next farm who is trying to raise good hogs; not able to get any more for them—

Q. That declaration of yours interests me to a great extent, so I took the trouble to go to the Bureau of Statistics and got statistics on the prices paid for hogs in the Montreal market for the last ten years?—A. Yes.

Q. In looking over these statistics I find that the incentive to produce a better hog in that district is not there, and it is due to the fact that the price that is paid on the Montreal market for butchers at that time, was over and above bacon prices. That is according to the statistics. So I imagine if a farmer in that district can sell pork on the market, which he has not got to look after to the same extent as he would the better class, and which will yield him a better price, he will not have much incentive even if you tried to pass laws to that effect. In a situation such as this, do you think that you would help the producers very much?—A. The answer to that is simply this sir—

Q. I have the statistics with me so far as prices are concerned, and I can prove them?—A. You can prove that the prices for bacons and butchers were relatively on the same level on the Montreal markets.

Q. I am talking about butchers being above bacons?—A. You are talking of the average weighted prices. The average weighted price but the quotation would be the same. The factor that makes the average weighted price different, is you have a higher percentage of butcher hogs, and so the average price is higher.

Q. I am talking about the statistics?—A. Your statistics are on the average weighted prices, and it is right, because butchers probably average 5.55 and bacons may be 5.50. That is due, when taking the average weighted price, to the fact that you have a higher percentage of butchers than you have of the bacon grade. What actually happens on the Montreal market is this. These grades are not sold on their merits. That is the point I am raising. Your bacons and butchers, these two grades, are sold together, and offered to the trade together. The trade averages the price. The man who is selling bacon and select hogs on the Montreal market is not getting as much, relatively speaking, in the Montreal market. It is higher than any other on account of the flat prices; but relatively speaking he is not getting as much for good grades as he is for the poor grades, and it is the good grades that are selling lower grades. The reason for that is this: If you take the better grade out and sell it separately, as we are asking or suggesting, if you take the bacon grade out and sell it on its merits, and take the butcher grade out and sell it on its merits, I am satisfied the butcher grade will not sell for anything near the price of the bacon grade. If it were allowed to stand on its merits, it would not.

*By Mr. Totzke:*

Q. Even in Montreal?—A. Yes.

Q. With the local market?—A. With the local market.

*By Mr. Bertrand:*

Q. I want to make this point clear: These hogs that are sent to Montreal are all mixed, and we find a quantity of butchers are coming from the province of Ontario, and from the western part of Canada?—A. Yes.



Q. Apparently they come there with this particular type of hog to get a better price than they can on any other market?—A. Yes; because, as I explained a short time ago, they have enough of a bacon grade to bring up the average. In other words they take about 15 cents less for bacon and get 15 cents more for butchers in the Montreal market. Now, let me put it this way. I have here the figures which will give you a general picture. Why should hogs that are adjacent to the Toronto market, within 20 miles of the Toronto market, come through to Montreal?

Q. Because, apparently, there is a local demand for that type.—A. Yes; then there are good hogs that are 200 miles nearer to Montreal than are coming to Toronto; therefore, Toronto is paying a higher price for good hogs.

Q. I quite agree with that. I am not opposing the producing of the best hogs that we can secure if by that means we are able to secure the British market for select bacons and compete with others, but apparently there is a situation on the Montreal market controlled by the local demand, and so far as the statistics are concerned, I cannot see that you can count very much on changing that and improving the grade we have?—A. All I am asking or suggesting is, so far as the Montreal market is concerned, instead of putting the butcher grade and the bacon grade in together and making one grade, separate them. Naturally when you put those bacon hogs with the butcher hogs it improves the average quality of that run of hogs. All we are asking is that these two grades be sold separately on their merits.

Q. I have interviewed a few of the drovers and they tell me that they would rather sell the select bacon in Toronto but insofar as the general run of hogs is concerned, they would rather sell them in Montreal?—A. Yes.

MR. GOBEIL: That would simply mean that the province of Quebec is condemned to raise a low type of hog.

MR. TUMMON: The Montreal buyer simply averages the price over the whole thing.

WITNESS: No, just on the two grades. At one time they did and recently—I cannot tell you the date—they agreed to pay a premium on selects. Now they are paying a premium on selects. There has always been a differential on heavies and lights. The differential on lights is lower in Montreal than on other markets as the figures I gave you the other day showed, because there is a little better market for them; but they do sell or were selling, their bacon and butchers on an average price. They were not separating those grades for sale.

*By Mr. Bertrand:*

Q. Can you tell us how much bacon has been exported from the Montreal market, from Montreal as hog bacon?—A. I could not tell you. We have no figures for each plant. Up until about a year ago there was practically no export from Montreal.

Q. Practically no export from Montreal. Consequently, the local demand controls the market there?—A. Yes, the local demand controls the market there; but there is a considerable high quality trade in Montreal. There is a certain trade in lower quality.

*By Mr. Gobeil:*

Q. You have just said there was a premium paid for selects on the Montreal market?—A. Yes.

Q. Well, 75 per cent of the farmers in my constituency claim that they are not getting that premium?—A. I believe that probably to be quite true, sir.

Q. What is the cause?—A. Well, it is not being paid to the farmers, that is all. The drover gets it or puts it in his average price.

Q. And there is no way to force the drover to pay it?—A. Not without enabling legislation.

Q. That is what I wanted to have well established, because I know the farmers are not getting their premiums for selects in Quebec—in my district anyway.

*By Mr. Weir (Macdonald):*

Q. Is there enabling legislation in all the provinces?—A. There are three provinces that have not.

Q. Have Manitoba, Saskatchewan and Alberta?—A. All the western provinces except British Columbia.

*By Br. Boyes:*

Q. They all have it except British Columbia?—A. Yes.

*By Mr. Smith:*

Q. The practice followed in Montreal is really a deterrent to the improvement of our grades throughout the whole of Canada?—A. It is because the market in Montreal affects all Canada. There are hogs drawn from every province that raises hogs except the Maritime Provinces and British Columbia.

*By Mr. Gobeil:*

Q. But that applies just the same to the province of Quebec?—A. Yes. That is the only market that affects it.

*By Mr. Carmichael:*

Q. The situation in Montreal does not affect the quality of the export trade at all, in that there is no export from Montreal?—A. They have been exporting lately.

Q. Since we have had a quota applied to us in the British markets, has there been any quantity exported from Montreal?—A. I could not tell you what the volume is. They are exporting a fairly good quality of hogs from Montreal now. As a matter of fact, those plants are buying the best hogs in western Canada on direct shipment.

*By Mr. Boyes:*

Q. And no doubt they are shipping their best qualities to the Old Land?—A. Yes, absolutely.

*By Mr. Carmichael:*

Q. Are they shipping any of that inferior quality to the Old Country?—A. No. They have to go into western Canada and western Ontario to get their hogs for export.

*By Hon. Mr. Motherwell:*

Q. When did they start to pay the premium of \$1 per hog in Montreal?—A. Well, I should know—I think it is about two years ago.

Q. That shows they are getting closer to your better grades.

*By Mr. Pickel:*

Q. It is a longer time than that?—A. No. They always have—the Federal Co-operative, I mean when they came to an agreement to all do it. Was that more than two years ago?

Q. I know it is more than two years ago that the farmers have been supposed to get the \$1 on selects. I have always contended that they do not get it.—A.

The hogs sold by Federal Co-operative were always sold on grade in Montreal. There was no agreement established on premiums on the Montreal market until—I think it is two years ago.

*By Mr. Gobeil:*

Q. When you say that the premium is paid you mean it is paid by the packer to the drover?—A. Right, sir.

Q. And our complaint is that the drovers are not returning that premium of \$1 to the farmers?—A. Yes.

Q. That is our complaint.

*By Mr. Mullins:*

Q. If you were half-way between Toronto and Montreal and had gathered a carload of hogs through the country which market would you go to?—A. Assuming that both markets were in proper relationship to each other?

Q. No. If you were a farmer and had a carload of hogs which market would you go to, Montreal or Toronto?—A. That would depend on the relation of the price.

Q. No. You are a shipper. Which is the best market for you?—A. Are you talking, sir, about the competition on the market?

Q. I am talking about which is the better market, Montreal or Toronto?—A. Well, here is what the shippers say—

Q. Is this not the case? Is there not more competition on the Montreal market than on the Toronto market?—A. Absolutely. There is no competition in the Toronto market.

Q. That is the point I want to get at?—A. Yes, but I wish to go further and say this, that because there is no competition on the Toronto market I am not intimating that there is no competition. The competition has long since removed from the Toronto market out into the country. There are a comparatively large number of packing plants operating in the country and that is where the competition is. The packer in Toronto has got to reach out and compete with those packers in their own territory. Because there is no competition in the Toronto market does not intimate that there is no competition, because the plants in Toronto have to compete with the plants, say, at Kitchener, or they have to draw hogs passing through Stratford.

Q. I am talking about a load of hogs half-way between Toronto and Montreal.

Mr. TUMMON: Your load of hogs is at Belleville.

*By Mr. Mullins:*

Q. Is there not more competition for various grades of hogs in Montreal and a better outlet than there is in other markets—Winnipeg, Toronto or any of the others?—A. I do not agree to that. I will put it this way. I will answer your other question first. To the average drover the Montreal market is the last market he wants to sell on for this reason: he is liable to take a real loss, or he may make a lot of money. The market is liable to go up or down and he would much prefer to take a guaranteed price from the packer when he knows he is making a certain definite price, but on the Montreal market he may either lose half a dollar a hundredweight or he may make half a dollar. As regards competition on the Montreal market, the Montreal market of necessity must be competitive because they have a limited local supply of any class of stock. This market has got to buy from 60 to 70 per cent of their requirements in competition with Toronto, Winnipeg, Calgary or Edmonton and they have got to get this stock past those markets. The same thing applies with respect to all classes of live stock, because they have not got a local supply. In that respect Montreal



markets must always pay a price that will draw hogs past Winnipeg and draw hogs past Toronto. In that particular respect Montreal is different to any other market in Canada.

Q. Now, I will ask this other question. I am not in favour of hog grading, although I want it distinctly understood that I think the hog grader can do good work out in the country teaching the farmers what type of hog is needed. I have a letter here from Souris, Manitoba that is staggering. I will read a portion of it. The hog grader picks out selects and when they go to Winnipeg he finds he has got bacons. This letter came in this morning's mail.

Mr. TOTZKE: Is this a department hog grader who picked out the selects?

Mr. MULLINS: I am speaking of the hog grader.

THE ACTING CHAIRMAN: Would you read the letter. Perhaps it would be better to put the letter on record and there would be no misunderstanding.

Mr. MULLINS: This is from Souris, and he says:—

A short time after the grading came into use the agricultural society of Souris sent to the department for a man to come to Souris who understood the grading and give the farmers a demonstration on hog grading and what type of hog the market demanded. In due time they sent one of the hog graders from Winnipeg. A load of hogs was assembled in the stockyards, Souris, and two of my breeding were selected and earmarked. The grader stated these hogs were the ideal type and was what the grades demanded, when the returns came back they were again graded in Winnipeg and stated they were bacons not selects.

Now, there is no premium on bacon as far as grading is concerned, there is a man who stated in this house to my friend here and to Mr. Porteous that he had a carload of hogs on the Montreal market and he put them in and said to the grader, "Go in and grade those hogs for John Smith"; and he went in and got 8 or 10—7 or 8 select hogs. He took the same car of hogs and he moved them over here into another pen—pen No. 40, and he said to the hog grader, "Go in and grade this man's hogs," and they graded 7 or 8 selects. He took them over and put them in another pen—the same car of hogs—and he said, "Grade those hogs." He graded them and got 7, 8 or 10 selects. He did it all the time on the same car of hogs.

Mr. TOTZKE: Was it the same grader?

Mr. MULLINS: I do not know; but he got one car of hogs graded four times and he got selects out of it each time. The point I want to make before this committee is that five cars of hogs were bought in Winnipeg on order from Montreal and they wired at the same time to sell out the selects and he sold out 84 selects in Winnipeg and filled them out with cutback hogs, enough to fill out the five cars of hogs, and when the cars came to Winnipeg the hog grader said, "What number of selects did you have in Winnipeg in these five cars?" He said, "eighty-four." The grader said, "Well, I have been through them, and I can only find eighty." Now, that statement was made to Dr. Pickel, and he knows. I could not tell you this the other day. I think I told him to tell the Minister. Did he tell you?

Hon. Mr. WEIR: He said it was at the beginning of the hog grading, 1923, I think he said; but he also stated there was no criticism now at all with the hog grading.

Mr. MULLINS: Now, that is a statement he is going to make either here or before the price spreads committee as to hog grading. Now, I have no fault with hog graders, only I do not think they are necessary. I have spent fifty years of my life in this business and I have watched conditions. I only touched hogs once. I took 47,000 hogs to Toronto and got a trimming twenty years ago, and I learned what singers were. I do not want to have anything to do with

your selects. The only thing you are talking about is \$1 premium that is given to the farmer, but when they take the cut-backs, the farmer gets as much as \$7 off a car. The packers are not asking for this. They do not ask to do away with the graders. I am looking after my farmers, and the requests that I am getting from my constituency in the country. Now, in the matter of finishing the hog you can use the hog grader. The Minister does not need to do away with them, because I think they could be used that way. They are students of Agricultural colleges and ought to be able to tell the farmer what type of hogs he can use. Now, the bacon hog makes a good Cumberland cut. The ham on a bacon hog is far superior to the ham which is on a Wiltshire cut. Go and look at a Wiltshire cut some day. It has not got the nice plump ham of the bacon hog, and that bacon hog is being sold and exported as a Cumberland cut, and they have a fair trade over on the other side. I stood in the bacon market in England and I saw Wiltshire sides sold and Cumberland cuts sold, and I saw where there is a good trade for the Cumberland cut. But there is no premium on the bacon hog at all. I think you can do away with the hog graders and send them out to the country to teach the farmers what to raise and what the market is asking for. That is my judgment. I may be wrong. I stand to be corrected. If I am wrong I will turn right about face. Fifty years of my life has been spent in this business and I have watched the system going on, and I think in the interests of the farmers and agriculturists of this country that hog grading should be dispensed with.

Mr. TOTZKE: You are not interested in the export market.

Mr. MULLINS: Yes, I am.

Mr. TOTZKE: You know that our export market cannot be maintained and improved unless we have grading, unless we supply the quality of hogs that is demanded; and that is why I am in favour of grading.

Mr. MULLINS: When you come to that export market, there are workshops up in the middle of England that will take these Montreal hogs for rough meats. There is all kind of trade in England for that bacon. I know that we want the best in certain parts, by they can consume in the manufacturing areas of England this other grade of hog.

Mr. TOTZKE: Will that be enough?

Mr. MULLINS: They do not want a Wiltshire. It is Canadian; it is not Wiltshire. True, we can keep up the standard of our Wiltshire that is sold as Wiltshire, but the other is sold at a lower price and they can ship it and put it on the bacon market. That is as near as I can answer that. The same is true with a rough bunch of cattle. You can stand in the Liverpool market or up in Leeds or Yorkshire and you can put those rough steers on sale and the finer cattle goes to London. So, you have two trades for the beef cattle and two trades for the rougher hogs.

The ACTING CHAIRMAN: Mr. Pearsall wishes to make a statement in reply to Colonel Mullins' statements. I do not think we can accept as evidence the statement which Colonel Mullins has made to us regarding something that was told him by a gentleman from the west, because that gentleman is not here to give evidence himself.

Mr. MULLINS: He is here this afternoon.

The ACTING CHAIRMAN: It is a hearsay statement of something that occurred several years ago and we could not accord it the same degree of standing as evidence which is submitted by a gentleman who appears before the committee. I wish you would allow Mr. Pearsall to make that statement.

The WITNESS: I want to make this explanation. I will leave it entirely with the committee. First, in respect to Colonel Mullins' statement I believe the terms of our quota agreement with Great Britain is that all our bacon must be of good quality. In regard to a statement of what has happened in respect

to grading at various times, I would welcome evidence submitted before this committee to substantiate that, because I think that those things should not be said unless they are true in respect to the way hogs are graded.

Take the Montreal market, it is the same as any other market. The stockyards keep a log book on which they record the unloading of every car with the number of hogs and the number of cattle. The same is true with regard to trucks. That log book is kept in the stockyard office. Our grader has a complete list of the receipts for that yard for the day. If hogs were regraded he will have grading records for more hogs than are shown as actual receipts. Is he going to stand there and permit that thing to go on?— Every hog in that yard is accounted for. Here is a load of 75 hogs. If he has graded a load twice he has an extra grading certificate.

*By Mr. Boyes:*

Q. I was very interested in listening to Colonel Mullins' claim for his farmers in the west. Now, possibly that might suit his farmers in the west, but I am quite confident it will not satisfy the producers of hogs in western Ontario of which we have heard such a good record stated in this committee. I wrote to a prominent farmer in Middlesex, in my riding, where we have been producing hogs for a number of years, and I will read you a short statement here which will enlighten you to some extent as to what they think of the grading in western Ontario.

MR. MULLINS: Did the Dominion not have anything to do with it? Did they not pay anything for it?

MR. WEIR (*Macdonald*): The policy is to work together. I am not interested in who is doing the paying or who is responsible for the general promotion of the work. It is all the more to the credit of the Dominion government if they were in the picture. I am speaking of the production of that carload of hogs that competed at Toronto, and the governments, both the dominion and provincial governments very largely had control and supervision of the whole thing. Now, I am sorry I was not at the meeting a week ago, because some of the remarks I have to make now may have been covered at that time. The attempt, as I see it, at the present time, is to turn towards what is commonly called rail grading from the ordinary grading on the hoof. I would like to direct this question: does the Department of Agriculture think that rail grading will provide the same incentive to improve quality back to the farmer as the present system does? It is going a little further away from it. Another point in that same regard which I think has an important bearing on it is this: what records have we to show how the graded hogs—that is graded on the hoof—have really turned out when slaughtered and graded on the rail, for the different classes of trade that they went in for? There is one feature of this grading on the rail that I have not got clearly in mind. I am afraid it is a mechanical difficulty that is going to be pretty difficult to deal with. We all appreciate that a large number of hogs are going to be moved a long distance. I understand that a flat price is intended to be paid when the hogs are purchased, and a certain extra remuneration on the basis of the grades. I can conceive that hogs every month will move on to the open markets, but the thing I am afraid of is that we might have a carload of first-class hogs in Manitoba with a high percentage of selects, and when they got banged around and bruised in travelling to other markets they would lose their position with regard to grade. That is the fear I have with respect to rail grading: first, the difficulty of getting the price back, and secondly, the trouble that is going to exist with respect to bruises and damages to the live hog before he gets in a position where he can be graded, on account of the long distances.



The WITNESS: With regard to the matter of settlement, I think I presented that phase the other day. We recognize a problem there, but we are not going into this and turn our whole system over immediately. What we want to do is take the hogs that are graded in such a way that they are adaptable for rail grading at local points in Ontario. With regard to hogs for grading in Manitoba, we realize that for the time being these movements of hogs over long distance cannot come under rail grading. This is absolutely voluntary.

With regard to bruises we will absolutely state in any regulations that are prescribed for grades that bruises will not be a factor in determining the quality of an animal, because you should not penalize a farmer for bruises when you do not know where those bruises occurred. They might take place at the loading station, en route or at the stockyard or in the packer's pens.

Hon. Mr. MOTHERWELL: Or at home?

The WITNESS: Or at home. For the time being, as far as bruises are concerned, it will be absolutely ignored in determining the grade. Here is a hog of select quality of proper type and conformation, and the mere fact that it is bruised will not be a defect in the carcass.

Mr. WEIR (*Macdonald*): Who is going to pay the premium?

The WITNESS: The packer says that now.

Mr. LUCAS: How will that affect bacon on the export market?

The WITNESS: That could not be exported.

Hon. Mr. MOTHERWELL: I have not very much to say; but there are one or two points about the Montreal market and Colonel Mullins' remarks that I would like to consider, because Colonel Mullins' criticism has some foundation in it. But I would like to point out to the committee that any species of service that depends upon human judgment is bound to be governed by conditions, and it does not make any difference whether you are referring to the judges of the shows or whether you are referring to the judges in the Supreme Court of Canada, you will find people going to the Privy Council to get an ultimate decision, and if there was a body above that body you would find them going there later. No, we must not look for perfection in any direction where the human has to be depended upon. Well now, having regard to that, I do not think there is any great difference between the hog grader's judgment and the judgment of the judges on the show ring. We have what we call line animals, that either go in this way or forward, depending upon the least thing, and that has been always one question that took us a long while to get familiar with in regard to the matter of grading grain. You may get the break against you one month, but you are just as apt to get the break for you the next month; so that in a period of ten years you get a square deal. If you are the only one on the rack you will not get the break against you in grading, you would be out; but if you were continuously there, you would get your share of the breaks in regard to the line stock. The result would be that you would find you would get a square deal in the main.

The situation in Montreal will continue, Mr. Chairman, in my judgement so long as you have not enabling legislation to take up the federal grades. I think they are doing wonderfully well in Montreal considering you have not got any law behind the grading system, passed by the provinces. They are improving; they are paying the dealer as much as they did at the outset; they are sending Wiltshire sides, which shows they have the market there for the best stuff as well. They have not got away from the old fashioned practice of buying on a flat rate basis, and that is the reason why they throw selects and bacons in together. Even without the necessary law there is a slight improvement. But because of the large local market, it is inevitable that a home market will be found for out of line stuff, lighter lines or even heavies. This is due to the fact that they have no enabling legislation and a big variety of demand. They have a large population, over a million people, one-tenth of the people of all Canada.

That means they have a great diversity, and consequently can give a little better price for out of line or out of grade stuff. I have no doubt the Montreal situation will improve; it is not discouraging at all because it happens to be a little bit different from the regular market that we think about. Now, in regard to the smaller markets that the witness has spoken of. Take the case of Schneider, of Kitchener. He is one of the most ardent advocates of grading. He does not do much exporting. His is largely a home market. He demands the very best stuff he can get from the farmer, and he has competition from Toronto. I think the witness has given good evidence in regard to that, a good statement in regard to competition there, by the smaller packers such as we have in Kitchener. Schneider's even send some bacon to the city of Ottawa, because of quality. You cannot convert a short shouldered hog into a high class hog. It must be in the blood, and no packer on earth can perform miracles on a poor grade hog.

*By Mr. Smith:*

Q. What is the difference in the cost of producing low grade pork and high grade pork?—A. What is the difference in the cost of producing high grade pork and low grade pork? You can approach this question from this angle: In tests at experimental stations there is little difference between the cost of producing a well bred lard type hog and a well bred bacon type hog.

Q. Why not produce the better grade, then?—A. The problem in the country is this: We have very few well-bred lard type. The hogs that are being produced are largely cross breeds, and the well-bred bacon hog. They are raising this type in western Ontario. They are not only producing good hogs, but increasing production. I would take it that the farmers are satisfied. I was at a meeting of 145 hog producers in Toronto a month or so ago, and this question was asked: Why should we not get more premiums for our select hogs? I replied: You are the men who produce them. What is the difference between producing a good hog, a bacon hog, and the butcher hog? The answer in unison was, no difference at all. Therefore, why increase the premium on an artificial basis. I think that is the answer to the lower production in eastern Ontario. The farmers are discontinuing production themselves in spite of the fact they are favoured by the highest market in Canada.

*By Mr. Lucas:*

Q. Mr. Pearsall, is it not generally understood that Denmark has been our chief competitor in regard to high-class bacon production?—A. Yes.

Q. Is it not also a fact that Canada receives the lowest price of any country shipping on the British market during last year for bacon?—A. Yes, at times.

Q. Take the whole year?—A. The point I want to make is this: I want to show we are behind those other countries in producing high-class bacon. I probably mentioned this before. In January, 1933, a year ago. The price for Canadian bacon, low and high, 44 to 48 shillings. I should have had the volume that was shipped for those months, but it was about 3,000,000 pounds. During the months of June and July we increased our exports up to around seven and eight millions; one month we shipped 8,000,000 pounds. The week of the 8th of June the bottom was 50, and the top was 62, a difference of 12 shillings on 50 shillings, indicating poor quality.

*By Mr. Totzke:*

Q. Canadian bacon?—A. Canadian bacon.

Q. What was Danish bacon?—A. I have not the prices; I imagine at that time the top was probably around 74. We are in this position. We have only a certain percentage of good grade bacon; we have not enough good bacon. We are in the unfortunate position of having to buy our way back into the

British market. Very often these countries do not appreciate the circumstances. In the case of a retailer previously handling Swedish bacon, our agents try to interest him in Canadian bacon instead of something else. To establish our product we have been going through this process of buying our way back into the British market, which has accounted in a certain degree for the differential between the prices. It is not really all quality. There is not 12 shillings difference between our bacon and Danish bacon.

Q. It is in the name, more than anything else?—A. Yes. As we get our marketing avenues established, and keeping in mind that point you raised before, about continuity of supply, then our difficulty of establishing a better price level will be lessened.

*By Mr. Smith:*

Q. Did I understand you correctly to say that not only is the quality of bacon we are shipping to the British market a factor, but volume will be a determining factor in future negotiations after the five-year period has ended?—A. Absolutely. That is the reason at the present time we have to estimate every six months the amount of bacon we are going to ship. The British government has to know to enable it to keep its price level, and therefore we have to say what we are going to ship, so that they can arrange the quota for the other countries on that basis. If we were to ship an average of 50,000,000 pounds that would indicate our possible production. There would be no reason for us asking for 100,000,000 pounds quota. It is important to ship on a volume basis as well as on a quality basis.

*By Mr. Boyes:*

Q. Would you not expect, considering the increased price of pork at the present time, that we will not increase our production materially in the present year?—A. Yes; I would imagine our present hog prices in relation to other live stock prices are so favourable that undoubtedly there would be a swing towards greater hog production.

*By Mr. Smith:*

Q. There is one other question I should like to ask. Take into consideration the different countries we have to compete with in the production of bacon. Are we not in as good a position as any country in the world, in view of the fact we have ourselves good coarse feeds in abundance to enable us to produce hogs as cheaply as any other country?—A. Undoubtedly, sir. We are ideally located. The natural grains that we grow are suitable for the production of the type of hogs that are required. The districts in which these feeds are available also have a supply of dairy by-products.

Mr. GOBEL: May I make a few remarks in connection with the point made by Mr. Motherwell? I do not think there is any doubt that the large population of Montreal makes it a very good market, a better market than any other place in Canada, but I fail to see why it is not necessary to pass legislation to permit the federal government seeing to it that the premium goes to the farmer. You have nothing to do with the prices paid for lower grades. I am insisting on that point, because I have had so many complaints from farmers in my own constituency. It is true I am not a hog breeder or raiser, but I think that a lack of this legislation has very much prejudiced the farmers in the province of Quebec; and I should like to ask the Minister of Agriculture to make strong representations to the province of Quebec to have this legislation passed. I do not want it to be looked on as if I were trying to make this a political forum, and speaking from a political point of view. I think our farmers need that, if they are not getting the premium on their selects. They should get it. If we look at the percentage of selects in Quebec, we must come to the conclusion that there



is something wrong. We have the other side as well, but we have lost ground. In 1923 I see the percentage of selects was 10·9, while in 1933, ten years after, it was down to 9·3.

Hon. Mr. WEIR: With reference to the province of Quebec, until this export market had attained the prominence that it has, the attention of the Quebec farmer was not so forcibly directed towards the improving of a certain type of hog as it is now. I think that is the situation; but my impression is—and I am speaking from memory, although I think it is quite correct—that perhaps there is no province in Canada during the past two or three months that we feel is making a greater effort to improve the quality of their seed stock. Is not that so, Mr. Pearsall?

WITNESS: Yes.

Hon. Mr. WEIR: That is the objective not only of the farmers' society, provincial and federal, but everyone, to improve their material as far as it is possible; to get sows or gilts of the right type, and get them distributed among farmers themselves. Seeing their great desire is to do this, I believe that the improvement in our export bacon will be such that the provincial government will realize the important thing it is. It is due to a condition that has arisen during the past two years. What do our hog graders do? All they do is to put the hogs in their respective classes, so that when they are sold, the farmers away back in the country, no matter how far back they are, can see for themselves the type of hog it is and what price it must bring. They could not do that if they were sold on a flat basis. There has been some difficulty between the live stock commission men and other interests and the packers, in buying on grade. This difficulty has arisen in Montreal lately, but we are endeavouring to have all the hogs sold there as far as possible on grade. We had the people who were making some objection to it in to see us last week, Friday and Saturday. The commission men that were here—including the president of the Live Stock Exchange—in my office with some of my officials stated this: That all we want is to put the hogs in their separate grades and for us to sell them each grade separately. In a way, that is a difficult thing to do.

Mr. TOTZKE: In the Montreal market?

Hon. Mr. WEIR: Yes. We immediately got in touch with the representatives of the packers in Montreal; we had them come to Ottawa, and they agreed on that method of sale. They said they would do this, if it was felt that the peculiar conditions of the Montreal market necessitated it. We thought the whole thing was solved, but I believe that there is slight difficulty, and that those who stated they wanted them sold on grade, feel that they will have difficulty in disposing of some of the grades.

Mr. MOORE: The drovers?

Hon. Mr. WEIR: No, the livestock commission men, rather than the drovers. Here is an important point. We all admit that Denmark and Sweden stand at the top in regard to the quality of the bacon they produce; and I think that is accepted by almost 100 per cent of the people in these countries that what has made it possible to get the world market is their grading and the rigid enforcement of grading. Their standards are very much narrower than ours. There is only a very few pounds that separate hogs of one grade and hogs of another grade. It is much narrower than anything we insist on.

If they have reached the top, and they freely admit that it has been due to this grading, that leaves us on safe ground. No person has been freer to admit than the hog graders themselves, that they are not 100 per cent perfect. You may have a dozen hogs, it is a matter of judgment as to which hog is a bacon hog or a select hog. There is no standard to show one or the other. I do not know anything that I resent more in this connection, than any person insinuating in the slightest degree that these government officials who have the

highest ideals in regard to the hog industry, are in any way favouring the packers. They may not be 100 per cent perfect, but I know personally that their sympathy is with the farmer.

The next point is this, the producing of hogs at the cheapest price. After a very long campaign and against a great deal of criticism the officials in this department, starting about four or five years ago, before I had anything to do with the department, inaugurated a system or policy of advanced registry in hog production so that they would be able to select the best breeding stock. A sow, for instance, gives a litter of a certain number of pigs, and that litter when fed will make a certain gain in a certain period, so that a man obtaining seed stock from that brood sow will know there is something in the blood which he could not know under the old system of registration. The officials deserve great credit for that in spite of the almost insurmountable opposition, and the result of their work is appreciated now by the fact that we have almost 100 per cent demand throughout Canada for establishing testing stations. In that regard, our farmers today will have more actual information as to where they can get seed stock. I cannot help but express the belief to you people who have taken such an interest in this matter, that we are fortunate to have had as a witness Mr. Pearsall, whom I am sure has impressed you with the very practical knowledge he has of the whole matter and the interest he takes in it.

Mr. GOBEL: I am very pleased to hear the minister say that a real effort is being made in Quebec, not only by the government but by the farmers themselves to improve the quality of their hogs. But, Mr. Minister, if the farmer does not get a premium for the high grade hogs that he sells, he will lose all interest in improving the quality of his hogs, and that is why I again say that I hope legislation will be passed to enable the government to enforce the law.

The ACTING CHAIRMAN: Gentlemen, I am sure we all agree with what Hon. Mr. Weir has said in regard to Mr. Pearsall. He has given us a very clear and very accurate statement regarding hog grading, also a great deal of information. Are you satisfied we have heard enough information on hog grading to go on at the next meeting with the question of egg grading, or do you think we ought to hear some further evidence in connection with the grading of hogs? If we have heard enough on hog grading, we shall drop that matter and continue with egg grading at the next meeting.

Committee adjourned at one o'clock, to meet again at the call of the chair.

## APPENDIX C

### PER CAPITA MEAT CONSUMPTION IN CANADA

Year	Beef	Pork	Mutton and lamb
	Lbs.	Lbs.	Lbs.
1934.....	70.02	87.71	5.20
1925.....	70.21	72.47	5.01
1926.....	70.10	75.23	5.99
1927.....	68.76	81.43	6.11
1928.....	67.33	82.48	6.46
1929.....	66.57	79.65	6.87
1930.....	65.79	72.93	6.92
1931.....	57.93	83.49	7.04
1932.....	56.02	91.79	6.97

1933 not yet available.

APPENDIX D

AVERAGE PRICES OF HOGS SOLD AT STOCK YARDS THROUGHOUT CANADA, 1923-1933

MONTREAL. Price Quotation F. & W. Basis (W.O.C. basis previous to 1930).

Grades	Average Price 1933	Average Price 1932	Average Price 1931	Average Price 1930	Average Price 1929	Average Price 1928	Average Price 1927	Average Price 1926	Average Price 1925	Average Price 1924	Average Price 1923
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Sel	6 38	5 21	7 64	12 59	12 73		11 18	13 81	13 46	9 71	10 69
Bac	5 88	4 80	7 18	12 17	12 09						
But	5 80	4 85	7 12	11 78	11 75						
T. S.					12 93	11 00	10 72	13 54	13 10	9 16	9 95
Heav.	5 39	4 47	7 00	11 26	12 50		10 61	13 71	13 25	8 97	9 63
E. Heav.	5 19	4 39	6 72	10 51	12 24		10 54	11 19	13 25	9 12	9 75
Shops					12 70		10 55	13 38	12 95	9 23	9 95
L. & F.	5 86	4 67	7 10	11 80	12 11		10 60	14 30	12 60	9 07	10 30
Sows No. 1	4 29	3 58	5 27	9 67	10 39	9 62	8 00	10 92	10 45	6 36	8 00
Sows No. 2	4 35	3 26	5 15	9 42	10 00	8 48	8 00	10 63	10 45	6 11	7 46
Roughs							11 14		12 13		
Stags							5 08		6 50	4 00	5 39

TORONTO. Price Quotation W.O.C. basis (F. & W. basis previous to May 1, 1924).

Sel	6 17	5 19	7 94	12 81	12 86	11 09	11 05	14 71	14 12	9 93	10 53
Bac	5 54	4 66	7 39	12 32	11 98						
But		4 11	7 09	11 94	11 55						
T. S.					12 38	10 51	10 35	13 32	12 85	9 10	9 76
Heav		3 74	6 15	11 14	12 13	10 03	9 65	12 93	12 36	8 23	8 99
E. Heav	4 29	3 28	5 66	10 84	11 07	9 40	8 78	12 25	11 90	7 11	8 26
Shops					11 19	9 44	9 36	12 13	11 75	7 97	9 20
L. & F.		3 96	6 57	11 09	11 01	9 98	9 24	12 61	12 15	7 94	8 84
Sows No. 1	3 96	2 72	4 67	9 46	7 55	8 04	7 41	10 06	10 00	6 10	6 48
Sows No. 2	3 27	2 66	4 11	8 37	8 67	6 69	7 58	10 14	10 10	6 69	6 76
Roughs	3 26	2 70	3 51	8 06	8 97	8 41	6 47	9 26	8 95	5 73	5 94
Stags	0 85	1 32	2 51	6 54	6 70	4 98	4 89	7 71	6 88	3 66	4 25

WINNIPEG. Price Quotation F. & W. basis.

Sel	5 36	4 32	6 53	11 22	11 18	9 60	10 08	13 23	12 55	8 35	9 57
Bac	4 81	3 86	6 09	10 51	10 40						
But	4 30	3 44	5 91	10 68	10 10						
T. S.					11 00	9 20	9 62	12 17	11 31	7 66	8 64
Heav	4 42	3 36	6 07	9 71	10 57	9 20	9 10	11 89	10 70	6 52	7 79
E. Heav.	3 84	2 72	4 76	8 89	9 86	9 20	8 22	11 37	8 70	6 02	6 94
Shops					11 10	8 69	8 84	11 54	10 15	7 20	8 00
L. & F.	4 34	3 25	5 32	11 12	10 68	8 98	9 55	12 67	9 23	6 25	8 51
Sows No. 1	3 93	2 74	4 47	8 14	9 04	8 33	6 63	8 78	7 35	3 98	4 87
Sows No. 2	3 13	2 32	3 79	7 90	8 10	7 45	7 03	9 68	9 33	6 26	6 68
Roughs	2 56	1 86	3 24	6 57	7 50	6 50	6 84	9 38	9 00	5 42	5 60
Stags	1 80	1 27	2 75	5 41	6 14	6 59	5 36	6 40	4 26	2 69	3 65

CALGARY. Price Quotations W.O.C. basis (F. & W. basis previous to April 15, 1924)

Grades	Average Price 1933	Average Price 1932	Average Price 1931	Average Price 1930	Average Price 1929	Average Price 1928	Average Price 1927	Average Price 1926	Average Price 1925	Average Price 1924	Average Price 1923
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Sel	5 15	4 10	6 75	11 18	11 55	9 70	10 86	13 86	12 70	8 03	8 72
Bac	4 64	3 63	6 09	10 91	10 29						
But	4 02	3 08	5 71	10 57	9 88						
T. S.					11 33	9 24	10 32	12 48	11 40	7 18	8 17
H.	3 40	2 85	5 39	9 24	10 27	8 63	9 24	11 81	10 32	5 81	7 45
Ex. H.	3 25	2 45	5 02	10 12	9 27	8 63	8 08	11 52	9 58	5 81	6 07
Shops					10 63	8 89	9 47	12 56	9 94	7 34	7 43
L. & F.	4 04	2 89	6 22	10 45	10 03	8 10	10 74	13 13	9 63	6 80	8 31
Sows No. 1	3 07	2 41	3 93	7 90	7 80	7 99	7 76	10 27	9 09	5 66	6 30
Sows No. 2	2 65	2 09	3 50	7 07	7 35	7 34	6 75	9 10	8 37	5 01	5 46
Roughs	2 27	2 36	3 04	6 22	6 67	6 63	5 95	7 89	7 40	5 12	5 67
Stags	1 75	1 51	2 24	4 02	3 19	3 00	3 00	3 00	2 87	2 87	2 95



EDMONTON. Price quotation F. & W. basis.

Sel.	5 08	3 87	6 25	11 16	11 36	9 58	10 68	13 34	12 60	8 09	9 57
Bac.	4 54	3 41	5 57	10 57	10 06						
But.	4 02	2 95	5 17	10 41	9 73						
T. S.					10 10	9 36	10 09	12 20	11 33	7 39	8 70
H.	3 38	2 67	5 03	9 36	10 18	8 96	9 14	12 03	10 40	5 94	6 78
E. H.	3 16	2 29	4 69	8 43	9 04	9 27	8 23	11 47	9 96	5 39	6 77
Shops					10 31	9 27	9 55	11 91	10 22	7 42	8 07
L. & F.	3 91	2 65	4 81	10 19	10 80	9 23	10 05	11 60	8 89	6 78	8 17
Sows No. 1	3 07	2 19	3 54	7 94	7 78	8 22	7 66	9 61	9 34	5 61	6 98
Sows No. 2	2 68	1 90	3 23	6 99	7 10	7 50	6 57	8 53	8 48	4 87	5 79
Roughs	1 90	1 54	2 56	6 08	6 77	6 55	6 16	7 73	8 33	4 09	5 75
Stags	2 10	1 33	2 29	4 32	3 40	4 00	4 46	4 65	3 60	3 00	3 00

PRINCE ALBERT. Price Quotation F. & W. basis.

Sel.	5 19	3 96	6 38	10 94	11 26	9 69	9 73	12 67			
Bac.	4 71	3 48	5 70	10 55	10 19						
But.	4 20	3 05	5 60	10 40	9 81						
T. S.					10 77	9 32	9 28	11 73			
H.	4 23	2 99	5 58	9 77	10 22	9 00	8 58	11 74			
E. H.	3 43	2 30	4 57	8 53	9 78	9 24	7 67	11 76			
Shops					10 79	9 09	9 03	11 24			
L. & F.	3 31	2 19	4 93	10 11	10 09	8 72	8 67	11 01			
Sows No. 1	3 37	1 92	3 83	7 43	8 62	7 86	6 55	9 90			
Sows No. 2	2 58	1 71	3 82	6 91	7 81	9 22	6 55	10 41			
Roughs	3 17	1 64	3 76	7 03	8 66	7 70	6 39	9 11			
Stags	1 98	1 26	2 52	4 65	5 95	5 66	5 06	4 83			

MOOSE JAW. Price Quotation F. & W. basis.

Sel.	5 19	4 01	6 27	11 22	11 09	9 32	10 72	13 52			
Bac.	4 71	3 52	5 85	10 77	10 18						
But.	4 20	3 06	5 65	10 38	9 79						
T. S.					11 01	9 21	9 79	12 38			
H.	4 23	2 89	5 50	9 69	10 47	9 00	9 11	11 94			
E. H.	3 43	2 28	4 56	8 58	9 75	9 53	8 18	11 31			
Shops					10 84	8 63	9 87	11 79			
L. & F.	3 31	2 69	5 07	10 24	9 63	8 44	9 58	12 33			
Sows No. 1	3 37	1 98	3 77	7 56	8 35	7 98	6 80	9 74			
Sows No. 2	2 58	1 64	3 01	6 93	7 48	7 51	6 80	9 24			
Roughs	3 17	2 42	4 43	7 51	7 66	6 54	6 18	8 64			
Stags	1 98	1 01	2 27	4 63	5 24	4 86	4 54	5 62			









SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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FRIDAY, MAY 11, 1934

No. 3

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Reference.—(Bill No. 53) An Act to amend The Canada Grain  
Act

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WITNESSES:

Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners.

Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

APPENDIX A. List of Members, Vancouver Grain Exporters'  
Association.





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

FRIDAY, May 11, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon.

Mr. Senn, the Chairman, presiding.

*Members present:* Messieurs Barber, Bowman, Bouchard, Bower, Boyes, Burns, Carmichael, Davies, Donnelly, Dubuc, Garland (*Bois River*), Gobeil, Golding, Hall, Loucks, Lucas, Motherwell, Mullins, Myers, Percy (*Qu'Appelle*), Pickel, Porteous, Segrain, Senn, Shaver, Simpson (*Saskatchewan*), Smith (*Victoria Carleton*), Spotton, Stewart (*Lethbridge*), Stirling, Torrie, Vallance, Weese, Weir (*Morden*), and Hon. Mr. Weir (Minister of Agriculture). 35.

In attendance, Hon. H. H. Stevens, Minister of Trade and Commerce, Mr. J. D. Fraser, Chief Inspector of the Board of Grain Commissioners of Canada, Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

The Committee proceeded to consider Bill 53, An Act to amend the Canada Grain Act, and on the Motion of Mr. Davis it was

Resolved that the evidence heard by the Committee be reported and printed in day to day form.

Mr. J. D. Fraser (Chief Inspector) was called and questioned on the Bill and its effect in regard to the grading of Garnet Wheat.

Mr. C. M. Hamilton, Board of Grain Commissioner, also gave evidence on the same subject.

The Committee then adjourned to meet again on Wednesday next May 16, at eleven a.m.

WALTER HILL;

*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

May 11, 1934.

The Select Standing Committee on Agriculture met at 11 a.m., Mr. Senn, presiding.

The CHAIRMAN: This meeting is called for the purpose of considering Bill No. 53, an act to amend the Canada Grain Act. I understand that the Minister in charge of the bill has a short statement to make in regard to the proposed amendments.

Hon. Mr. STEVENS:

"Mr. Chairman and Gentlemen, it will be remembered that two years ago the question of the grading of Garnet Wheat was before this same Committee. At that time it was decided that separate grades should be provided. It is not with the object of doing any injustice to the producer that these amendments are now proposed. It is more in the interest, and for the safeguarding, of the reputation of Canadian wheat, and to facilitate the sale of our wheat in the markets of the world. Since the last meetings of this Committee, many letters have been received, making complaints against the quality of No. 2 Northern wheat received out of Vancouver. I do not propose to read them all fully into the record, but to quote from a number to show that this is a very real issue.

"The Board of Grain Commissioners had recommended that since the presence of Garnet in No. 2 Grade brought complaints from millers and exporters, and other buyers, separate grades should be provided for this variety in order that the sale of Canadian wheat might be facilitated.

"There is danger to Canada's wheat market in the United Kingdom and other countries unless Garnet Wheat is kept out of No. 2 Northern. The shipments through Vancouver contained a large proportion of Garnet since most of the variety is grown in the Northern portion of Alberta and Saskatchewan, and this has reduced Vancouver grain prices."

"I also propose to refer to a number of letters and reports from milling chemists, which will indicate the attitude of those who are the purchasers of Canadian wheat to allowing Garnet to be mixed with the other varieties which have, up to recent years, formed the bulk of our product.

"The first communication to which I would refer is a letter from the Incorporated National Association of British and Irish Millers, Limited, dated July 28th, 1933. This is a letter to Mr. E. B. Ramsay, Chairman of the Board of Grain Commissioners at Winnipeg:—

"This matter has now had the consideration of my appropriate Committee, and I am instructed to inform you that the Members of this Association continue to express their keen dissatisfaction at the amount of Garnet Wheat contained in No. 2 Northern Manitoba which is arriving this season.

"I am instructed to press upon you the necessity for the matter to be settled before the new standards are made up. Unless this is done, and Manitoba wheats continue to arrive here containing such large proportions of Garnet wheat, it is feared that it will act unfavourably in the marketing of Canadian wheat in general, especially in view of the fact that Russian wheat is once more on offer in this country."



Letter from the Glasgöw Flour Millers' Association, dated November 9, 1932:—

This season, however, millers have received complaints from all sources that the flour was soft, would not stand up in fermentation, and were practically informed that the baker did not believe they were using Manitoban wheat entirely. The unsettling part was, that some wheats gave excellent results in every way, while the same grade in a different arrival was found deficient in those qualities associated with Manitoban wheats. As No. 2 was the lowest grade which millers were using, this experience was very disturbing.

It was finally discovered that in almost every case where complaints had been received, Garnet wheat had formed a varying percentage of delivery, and that the larger the volume of Garnet wheat in a parcel, the more the baking qualities of the flour were affected.

It seems to this Association, therefore, that in allowing Garnet wheat to enter into the standard grades of Manitoba wheats, Canada is seriously jeopardizing her world-wide reputation for high-grade strong wheats, and offering an incentive to buyers to use Russian wheats instead.

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Letter from Svenska Kvarnforeningen, Stockholm, Sweden:—

From several of our mills I have learned that in the last years the Canadian wheat has been of inferior quality. I have obtained the opinion from the mills that certain shipments of Manitoba II from the Pacific Coast contained Garnet, and that the quality of this wheat differs much to the general quality of Manitoba II.

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Letter from F. H. Palmer, Canadian Trade Commissioner at Oslo, Norway, in which he quotes from a letter from Messrs. Kvarnaktiebolaget J.G.S., Norrköping, Sweden, one of the largest flour mills in Sweden:—

We wish to point out that the latest shipments of Manitoba No. 2 from the Pacific Coast have turned out very unsatisfactory, in consequence of which one had to sell the wheat elsewhere. The cause of this has been the bad quality of the delivered parcels of Manitoba wheat. By analysing the wheat the percentage of protein is generally found to be rather good but by baking one gets a very bad result, for the bread flows out and gets flat. Evidently gluten has no gasbinding ability.

We have tried to find out the cause of this and are now of the opinion that the delivered Manitoba parcels, which have shown such bad gluten quality, have consisted of wheat of the Garnet type.

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This is a letter from the Royal Swedish Consul General at Montreal:—

On account of the inferior quality of the wheat, the importing Swedish mills have been forced to resell the wheat they had bought. This has, however, not been possible without considerable loss. Furthermore, it has caused the mills to buy wheat from other countries instead of from Canada.

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The following is a letter from Vancouver, dated February 9, 1934, and signed by the exporters named hereunder:—

Louis Drefus & Company.  
Bunge North American Grain Corp'n. Canadian Agency, Limited.  
Continental Grain Company.  
Hall Grain Company, Limited.  
Canada Grain Export Co. Ltd.

Owing to the serious situation which has developed, because of the present system of handling Garnet wheat, this Association, which is interested exclusively with the problem of marketing Canadian grain abroad, feels that certain facts should be placed before you.

We are aware that you personally, and also your Board of Grain Commissioners, are thoroughly familiar with the history of this variety of wheat and the various criticism which culminated in an extensive examination into the whole problem by the Agricultural Committee of the House of Commons during April and May, 1932. Our understanding, as a result of this investigation, was that separate grading for this variety of wheat was recommended. We understood also that your Board of Grain Commissioners approved a similar course. Indeed, it was confidently believed throughout Europe in the summer of 1932 that, effective August 1st, 1933, Garnet wheat would be separately graded.

It is not our intention to inquire why evidence of such an overwhelming character in favour of separate grading was not effective in creating the necessary legislation to bring about the required change in wheat grading. We shall content ourselves with a brief summary of the present position, which, unless remedied, promises to become increasingly serious each year and threatens to greatly injure the high reputation of Canadian wheat in the markets of the world.

An examination of the evidence given before the Agricultural Committee in 1932 will clearly indicate why Garnet wheat is being produced almost exclusively in certain areas in Alberta—which particular areas are naturally, and because of more favourable westbound freight rates—tributary to Pacific ports. Obviously therefore the problem has become of much greater concern to Vancouver than to Winnipeg or Eastern ports.

You are aware that, partly as a result of the Parliamentary Committee Investigation and partly as a result of the personal investigation conducted in Europe by your Board of Grain Commissioners, the Grain Inspection Department was prohibited from allowing any sample containing Garnet wheat to be graded No. 1 Northern or No. 1 hard. As a great percentage of the Garnet wheat, because of its colour, weight per bushel, and general appearance would otherwise qualify as No. 1 Northern, this restriction in grading very naturally caused virtually all Garnet wheat to be graded as No. 2 Northern. Since Vancouver receives practically none but Alberta wheat you will not be surprised to learn that export shipments of No. 2 Northern from Vancouver at present contain from 70 per cent to 80 per cent Garnet wheat. As a result of this situation we find that No. 2 Northern is trading here in a limited way at from 5½ cents to 6 cents per bushel under No. 1 Northern. We have reason to believe that if it were not for a scarcity of lower grades during the current season the discount would be even greater. As against this the spread at Fort William, where Saskatchewan and Manitoba Marquis wheat predominates, is 3 cents per bushel.

As No. 2 Northern Manitoba is the best known of all Canadian grades in overseas markets and is normally used to a much wider extent

than any other grade of Canadian wheat, the loss of reputation suffered by this formerly most popular grade is a matter of national importance. Unfortunately also it is causing direct and serious financial losses to Alberta producers of Garnet and Marquis varieties alike. The Garnet grower suffers because, in our opinion, pure Garnet wheat would, on its own merits, command a better price than the mixed Marquis and Garnet No. 2 Northern presently being shipped abroad. The Marquis producer suffers because Garnet is unavoidably mixed with it at the country elevator and/or in the Terminals at the Seaboard.

The Overseas miller does not necessarily object to Garnet wheat as such. He merely points out (as do the Canadian millers) that it has different milling characteristics, and when mixed with unpredictable and varying percentages of Marquis, the milling results are unsatisfactory. The condition has been aggravated by the relatively high price of Manitobas as compared with other wheats at present.

The Overseas miller makes the very natural request that he be given the opportunity of buying Garnet wheat separately in order that he may blend such types of wheat as may suit his particular requirements. He further points out that a statutory Western Canadian grade of wheat should be exactly the same whether the shipment be received from Montreal or Vancouver. He feels, and we think justifiably, that the Inspection of grain should be so administered as to make this a reality. He should not be required to ask the seller the name of the port of shipment. The Inspection certificate of the Dominion Government should be his guarantee as to uniformity of quality.

Aside from any other considerations we have mentioned, it is most unfortunate and we think unnecessary that wheat producers in that portion of Alberta which enjoys (because of its geographical location) a lower rate of freight to Pacific Coast ports for export than to Fort William, should find this natural advantage in many cases wholly nullified by the penalty they must suffer in shipping their No. 2 Northern to their natural export outlet.

It is the considered opinion of this Association that separate grading of Garnet wheat would have the following beneficial effects:—

1. We believe that, except for possibly a short introductory period, No. 1 Garnet would, on its merits command a better, or at least not lower price in foreign markets than is presently obtainable for No. 2 Northern Manitoba of the present character.
2. Growers of Marquis wheat would receive the full value for their product and enjoy the maximum benefit of their proximity to the Pacific Coast export outlet.
3. No. 2 Northern from the Pacific Coast would be fully equal in milling value to the same official grade shipped, from Atlantic ports.
4. The high reputation of the Canadian grain Inspection system and of the formerly famous No. 2 Northern Manitoba would be re-established in foreign markets, to the general benefit of all grades of Manitobas.

We respectfully urge that you immediately arrange for the necessary amendments to the Canada Grain Act and such regulations as may be necessary to make effective the separate grading of Garnet Wheat at the earliest date which may be practicable.



We may state in conclusion that the within views and this letter in its entirety have been approved unanimously at a General Meeting of this association to-day. For your information a list of members of our association is attached hereto.

(Signed by those mentioned at beginning of letter.)

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Mr. H. Horace Ward, Analytical and Consulting Chemist in England, who advises a great many mills regarding the quality of wheat, has, during the past year, sent the National Research Council copies of his confidential reports. We have received the consent of Mr. Ward to make available to this committee the contents of these reports. For the information of the committee it might be explained that Mr. Ward makes confidential fortnightly reports to millers in the Liverpool district on cargoes of wheat currently arriving.

I might quote the following, under date of March 22, 1933:—

Mr. Ward states:—

The presence of Garnet Wheat in Manitoba consisting of Marquis and other varieties is a serious disadvantage, not really because of its lack of strength, but because of the difficulty it presents in conditioning and milling, so that in a mixture composed of Manitoba and soft wheats its strength cannot become effective and it does not form as valuable a support for soft wheats as other types of Manitoba.

In my opinion, the wheat should be graded as a separate type so that, like Durum, it can be given suitable treatment before it is blended with other wheats. It would then be of much better value to the miller than it is in its present form mixed with Manitoba.

September 15, 1933

The presence of Garnet in Vancouver 2's is largely responsible for the uncertain quality.

January 26, 1934

The most serious change has been in the larger quantity of *Vancouver* Manitoba in place of *Atlantics*, particularly in the case of 2's and 4's which have been decidedly poorer both in milling and baking quality than *Atlantics*. This poorer type of Manitoba can always be recognized by the high percentage of dark, vitreous grains, largely Garnet, and there is often an admixture of starchy wheat.

There has been a distinct change in appearance and strength of recent Manitobas, particularly in the case of Vancouver 2's, the change probably being due to the arrival of new crop wheats in larger amounts. Many of the Vancouver 2's have been the dark hard-grained varieties containing a large proportion of Garnet Wheat.

These have been decidedly weak so far as their supporting capacity is concerned, and if Vancouver 2's have been included in the grist, and flour strength has been found to fall, they are probably the cause.

The strength of this type of No. 2 is so different from *Atlantics* that have been received recently, that very serious trouble may be caused in the flour when changing from one to the other and variable quality in an important wheat like No. 2 Manitoba, may have very serious effects.

The strength of each individual lot of wheat should certainly be ascertained before including in the grist.

If a new arrival of wheat has a very dark clear-grained appearance containing rather more starchy looking grains than the average, treat it with caution and include it only in very small amounts until the strength is known.

When buying forward, obtain Atlantics wherever possible, as they are well worth a slight increase in cost.

February 23, 1934

Manitobas are disappointing owing to the increasing amounts of Garnet now being included—even 6's contain Garnet wheat. Only by increased amounts of Vancouver wheats can fair quality be maintained. It is far better to keep to No. 1, which contains little or no Garnet, and a grist with No. 1 may be relatively cheaper, strength for strength, than one made with larger amounts of 2 and 3. It cannot be too strongly urged that so long as Vancovers only are offered and until Atlantics are available the best policy is to keep to No. 1 with a proportion of 4's to maintain Gas Production. Such a grist will not cost any more, if as much, as one made up with No. 2.

The early report on advance samples of Atlantic Manitobas showed them to be excellent wheats, and arrivals of commercial samples of Atlantic confirmed these results. The trouble is in the inclusion of Garnet wheat in Vancouver and from information received from Canada and elsewhere it seems as though Garnet may be included in Atlantics. As soon as Atlantics arrive on the market again they will be reported at once with particular regard to their composition of varieties. If Garnet does enter into Atlantics as well as Vancouver, the future for Manitoba looks serious.

April 10, 1934

As soon as Atlantics can be bought, they should certainly be obtained in preference to Vancovers, even though at higher cost. This does not apply in the case of No. 1's as in this grade there is not very much difference between Vancovers and Atlantics because Garnet wheat has not yet been introduced into No. 1.

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We have been assured that the volume of this particular wheat will find a better and freer market when it is segregated. The situation in the United Kingdom and on the Continent is gradually getting more serious.

Canadian wheat has held a high reputation in the markets of the world, and in these times when there is a surplus of wheat it does not seem advisable that Canada should continue offering to importers a grade of wheat which does not meet with their approval.

We have here one of the Board of Grain Commissioners, Mr. C. M. Hamilton, and the Chief Inspector of the Board of Grain Commissioners, Mr. J. D. Fraser. These gentlemen are here to assist the Committee, and any questions that you would like to ask I am sure they will be glad to answer.

Mr. VALLANCE: In order to keep the record straight, I think it is very necessary that some of the statements made by Mr. Fraser, such as 14 per cent of the entire production of the west is Garnet wheat should be verified. Having that in mind, I should like to ask Mr. Fraser a few questions.

J. D. FRASER, Chief Inspector, Board of Grain Commissioners, called.

*By Mr. Vallance:*

Q. I should like to ask you, Mr. Fraser, out of the entire production of Canadian wheat in the west, how much is Garnet?

Mr. BOWMAN: Is it agreed that Mr. Stevens' statement is to be incorporated into the record?

The CHAIRMAN: Yes.

The WITNESS: I say about 14 per cent of inspections.

*By Mr. Vallance:*

Q. Would you say, Mr. Fraser, that 80 per cent of that finds its way through Vancouver?—A. Eighty per cent of it finds its way through Vancouver.

Q. Because of the fact it is grown more extensively in Northern Alberta?—A. Yes.

Q. And Northern Saskatchewan?—A. Western Saskatchewan.

*By Mr. Garland:*

Q. Can you give figures for the two provinces?—A. No.

Q. Is it greater in Alberta than in Saskatchewan?—A. Yes.

*By Mr. Vallance:*

Q. To the best of your knowledge—I do not know whether you can answer this question or not—has the introduction of Garnet wheat made it possible to extend the wheat belt of the two provinces, Saskatchewan and Alberta?

A. I do not know whether I can answer that intelligently. The area of wheat has certainly extended north.

Q. Let me ask you this question: In your capacity as chief inspector, have you found the quality of wheat, since the introduction of Garnet, to be much higher than it was prior to the introduction of Garnet, especially in the northern sections of those two provinces?—A. It depends on what you call quality.

Q. Take your own grading. You grade quality. Is the grade higher than it was prior to the introduction of Garnet wheat?—A. A higher grade?

Q. Yes.—A. Yes.

Hon. Mr. WEIR: More No. 2.

The WITNESS: More 20.

*By Mr. Vallance:*

Q. Would you care to state that probably Garnet is playing a very great part in raising the standard of wheat grown in those northern portions?—A. Yes.

Q. You, as a technical expert, will agree with the statement the Minister made; in your opinion it would be to the detriment of the Garnet grower if we decided to take such action as is suggested and make a separate grade for Garnet wheat?—A. Of course, I think that would be finally decided by the growers of the wheat. I do not think we are in a position to say how matters would develop; but outside of the information that I have from our own millers here in Canada, I can offer no opinion. They do not like Garnet or mixtures of Garnet, and in the Old Country I can hardly speak from letters like the Minister has read. I have seen some of those letters myself, letters which were not written to me—

Q. You have enough confidence in those individuals to say that they are authorities in the trade?—A. Yes; I do not think there is any question.

Q. The only point, Mr. Chairman, that I desire to clear up in my mind, is that those who are now growing Garnet wheat—and I think the committee is seized with the importance of it—may not be injured. I realize from the figures given, that 86 per cent is Marquis wheat, and it is rather a tragedy if 14 per cent is going to disrupt us, as has been suggested, by shipments going through Vancouver at a lower price than Montreal. It is regrettable, if those are facts, and I should like those facts to be proven before this committee takes any definite action.

*By Mr. Donnelly:*

Q. Mr. Fraser, how long is it since we have had Garnet wheat in this country?—A. About 1926; it may have been introduced in 1925.



Q. Has there been an increase in quantity grown year by year?—A. It has been holding fairly steady in the last few years. It increased very rapidly for a few years.

Q. How many years has it remained steady?—A. For about the last four years.

Q. In what part of the country is it grown chiefly?—A. Northern Saskatchewan and Alberta.

Q. Do you know the reason why they grow it?—A. The reason, I understand, is that it matures earlier, and in that way avoids the frost.

Q. In the last two or three years, has there not been a great shortage in the open prairies of Marquis wheat?—A. Yes.

Q. Has there not been a great drought extending over that country growing Marquis wheat?—A. Yes.

Q. Does not that make for the greater percentage of this Garnet wheat? Is it not because there has been no Marquis growing in the great open prairies, and we have been getting more wheat from the northern part?—A. Yes, that would increase the percentage.

Q. That would increase the percentage?—A. There is a factor that comes in there, of course. There is wheat in the elevators in the north and other places that has been there for two or three years, wheat that is two or three years old, and it may be Garnet that has yet to come out.

Q. Do you not think that if the open prairies—if we might call them such—were growing the usual amount of Marquis, the percentage of Garnet would be less?—A. Yes, no doubt, unless the Garnet was increasing in the north.

Q. Do you find, at the present time, the amount of piebald wheat increasing?—A. No, I do not think that; there is as much as formerly.

Q. Is not that accounted for by the fact that the people are now growing Garnet, where they formerly grew this piebald wheat?—A. Yes, I think that action has removed some of the piebald.

Q. With regard to our millers on this continent, have they a greater dislike for piebald than they have for Garnet, or have they greater dislike for Garnet than they have for piebald; which do they despise the most?—A. I cannot say, I do not know.

Q. They like piebald wheat?—A. No.

Hon. Mr. MOTHERWELL: Nobody does.

*By Mr. Donnelly:*

Q. I think most of the millers whom you say do not like piebald wheat, favour Garnet. Garnet has made up these defects, or improved them, in many cases, if you like, and I think you will admit that one of the reasons for the growing of Garnet in the north, instead of Marquis, is that they want to get away from this piebald wheat; is not that so?—A. Yes, I believe that is the producers' reasons.

*By Mr. Bowman:*

Q. Do you know what proportion of Garnet is grown in the province of Manitoba?—A. No; we have no records by provinces at all.

Q. How does the yield of Marquis and Garnet compare in the northern part of the two western provinces?—A. We have no record along that line.

Q. Have you personally no idea?—A. I have heard quotations given, and they vary. In some districts Marquis produces just as high as Garnet, and in other places it is different.

Q. I might say in the northern part of the province of Manitoba, the farmers claim that Garnet yields much higher than Marquis; and for that reason it has become a popular wheat there?—A. Yes.

Q. In the 14 per cent you have mentioned, there would be a portion other than Garnet wheat which would have a certain quantity of Garnet mixed in that could not be distinguished from it?—A. That 14 per cent would include some mixture. In fact, we very seldom find a shipment that is true to any one variety.

Q. You say that the quantity grown has remained about constant during the last few years?—A. Yes, up to the 30th April this year it was about 14 per cent, last year it was about 16 per cent, and 24 per cent the year before. The year before that, I think it was 16 again.

Q. Do you know whether whole districts in certain parts of the northern part of the three western provinces, particularly, are growing pretty much Garnet wheat?—A. From the inspection it would appear that Garnet is a large grower, largely produced.

*By Mr. Garland:*

Q. Where are those districts, Mr. Fraser? A. They are in the northern part of Manitoba, Saskatchewan and Alberta.

Q. Where you can definitely state that the bulk of the wheat would be Garnet?—A. Well, I would not like to say the bulk of wheat is Garnet. I believe there are districts in that portion where the bulk is Garnet.

Q. Is there any district, to your knowledge, in which Garnet purely is grown?—A. Not to my knowledge.

Mr. GARLAND: Mr. Chairman, I am not sure whether this question should be directed to Mr. Fraser or the Minister of Trade and Commerce; but if you separate this Garnet wheat into another grade, is there any chance of a market for it at the present time? Does any body know of an existing market for Garnet wheat?

Hon. Mr. STEVENS: That is a very important and very pertinent question. It is a difficult question to answer categorically; but I should like to explain it this way, from our experience in the department in regard to the marketing of wheat, or in regard to our reports from different sources, the information we received is, as Mr. Ward says, if the wheat was separated and those buying it knew what they were buying, we believe that the millers themselves would find other wheat suitable for mixing with that wheat, and they would possibly develop—we do not say definitely, but we believe they would develop—a real demand for Garnet.

In the flour milling industry of Great Britain, in particular, and the same thing applies to the continent, they use a great number of varieties in making up a batch, or whatever they call it, of their grist.

Mr. VALLANCE: Blend.

Hon. Mr. STEVENS: Grist. Now, the difficulty at the present time with our Manitoba No. 2 is this: Instead of being able to go out and buy No. 2, and know that that means a certain class of wheat, they may get a No. 2 with a large admixture of Garnet or a No. 2, chiefly Marquis, which is a different article altogether; and when they come to put them in their grist they get a result other than what they expect, and it is the uncertainty of it that is disturbing them. May I tell you, in conversations and so forth, the information we get is that there is a distinct reticence on the part of many of the British millers to buy Canadian wheat at all except when they know they can get number 1 because of the uncertainty of the number 2 grade. I want to say to the committee it is a real difficulty but, in my opinion—for what it may be worth—I believe with Garnet graded separately you would have a large quantity of number 1 Garnet because it grades up very well. Mr. Fraser could answer

this better than I can probably, but you would have number 1 Garnet, then you would have number 2 and number 3 Garnet, and it would be a type that probably would find a better position on the market than it has at present as an admixture in number 2 grade. I think personally it would be in the interest of the Garnet growers to grade it separately.

Mr. GARLAND: Then, Mr. Chairman, may we take it that at the moment the answer on the part of the Minister would be: No, there is no definite market now available for Garnet wheat.

Hon. Mr. STEVENS: Oh no, I would not say that at all. If I answer it in that way I would say: Yes, there is a market for it.

Mr. GARLAND: Where is it?

Hon. Mr. STEVENS: In Europe and Great Britain. Mr. Garland will appreciate this: No one could answer his question categorically. You have got to take the other factors into consideration. I am not certain, nor do I think anybody can be certain that Garnet would bring a higher or a lower price if it were graded separately.

Mr. GARLAND: Was not a test carried out a few years ago?

Hon. Mr. STEVENS: Yes, a test was carried out. A real milling test should be carried out. There were tests made, but the general view is that they were not really sufficient in quantity.

Mr. GARLAND: We have had ample tests as to quality, but I am referring to a shipment to Europe.

Hon. Mr. STEVENS: Yes, it was considered it was not sufficiently large.

Mr. GARLAND: Well then, there still appears to be an uncertainty in Garnet.

Mr. VALLANCE: Was it not 7,000 bushels?

Mr. HAMILTON: About 7,000 bushels divided up into lots of about 500.

Mr. GARLAND: I can appreciate the point raised by the Minister that there may be some uncertainty, but for the last five years the quantity of Garnet in relation to the whole has been constant, it has not increased during this period in relation to the total.

Hon. Mr. STEVENS: In number 2 grade the proportion of Garnet has not been constant. If you could keep your proportion down to 10 per cent then I do not think you would have any problem, but I think Mr. Fraser can tell you that some of your shipments of Garnet go up, many of them, 40 per cent and 50 per cent.

Mr. GARLAND: I am afraid it is going to hurt the grower of Garnet.

Mr. PERLEY: You made the statement that Canadian millers had some objection. What is the chief objection?

Mr. FRASER: The difference in the milling between Garnet and Marquis.

Mr. PERLEY: Is it not particularly owing to the low protein content of the grain?

Mr. FRASER: No, I do not think so. I think the mixture of Garnet being different from Marquis takes longer to temper.

Mr. PERLEY: If there is an objection on the part of the Canadian miller, and say he had a real objection, would it not have the effect of forcing all this wheat into the export trade?

Mr. FRASER: Yes.

Mr. PERLEY: And that would cause much more difficulty at the other end.

Mr. FRASER: Yes.



Mr. GARLAND: Is it not true that the Garnet protein content is very high on the average?

Mr. FRASER: It is mostly grown in the north, and all wheats grown in the northern parts of the provinces are lower in protein.

Mr. GARLAND: Take the grades of other wheats grown in some parts of the country that I come from, does not Garnet measure up very high in protein in relation to the others?

Mr. FRASER: Grown in the north, yes, but when grown in the centre and south, from tests that have been made, Garnet has been found generally lower.

Mr. GARLAND: Now, if we introduce this legislation, how is it going to be technically possible to separate the Garnet from other varieties, since you have just admitted that at no single point has there been growing of pure Garnet.

Mr. FRASER: It would have to be done, so far as the inspection staff is concerned, in the same manner as we have kept it out of number 1 Northern.

Mr. GARLAND: Is it not a fact that the protests against Garnet would be increased, and that there would be a temptation to grade down any mixture containing even a small percentage of Garnet if this legislation passes?

Mr. FRASER: Well, of course, if this legislation passes, I understand that the western committee on grain standards will establish standard samples for the grading of Garnet. I would say that a number 1 Garnet sample will be allowed to contain a certain percentage of other red spring wheat.

Mr. GARLAND: The Standards Board must have had this matter under consideration. I wonder if you have any information to give the committee as to the percentages they are going to allow?

Mr. FRASER: Well, as far as I am aware, it has never been placed before the committee to the extent of establishing or setting up standards. Definitions, I may say, for Garnet number 1 and number 2 were drawn up by myself and associates and submitted to the Board, and we suggested allowing 5 per cent of other red spring wheat in number 1 and 10 per cent in number 2.

Mr. GARLAND: Well, do you propose to vary the percentage, the mixture of Garnet in the Marquis grades after this legislation is passed, or will you leave that where it is now?

Mr. FRASER: That would be governed according to the definitions in the Act.

Hon. Mr. STEVENS: Mr. Garland, I do not think Mr. Fraser has got the purport of your question, because it certainly changes number 2.

Mr. FRASER: It would be governed according to the definition of the Grain Act.

Hon. Mr. STEVENS: I do not like to interrupt, Mr. Garland, but it would be a mistake, I think, to let it go that way. I think what Mr. Garland has in mind is this: If this legislation passes would number 2 permit of the same quantity of Garnet that it now does? You had better put that question clearly.

Mr. FRASER: Certainly not.

Mr. GARLAND: Well, then, you have got to change the Act in respect to that.

Mr. FRASER: Well, the proposition is to change the Act.

Mr. GARLAND: And then the Standards Board will set the mixture.

Mr. FRASER: No, not for 2 Northern. That will be established by this change in the definition.

Hon. Mr. STEVENS: That will be statutory, and is provided for in the next clause that I asked to be read, schedule 1 of the Act in clause 2.

Mr. DONNELLY: For instance, if I were taking a load of wheat into an elevator, and I had 20 per cent or 20 per cent of Garnet wheat mixed with my Marquis wheat do you think that they would be able to tell at the elevator that there was so much Garnet in there?

Mr. FRASER: Some of them would be able to tell.

Mr. DONNELLY: But do you think the average man will be able to tell?

Mr. FRASER: I am not in touch with the buyers in the country well enough to answer that question.

Mr. PERLEY: The grain men can tell. I have had some little experience, and if my grain buyer could not tell he would not be buying wheat from me.

Mr. GARLAND: The clause in schedule 1 to which the Minister has referred is: "Schedule one of the said Act is amended by striking out the words 'Red Spring Wheat of good milling quality' in No. 2 Manitoba Northern under the main heading of 'Variety of Grain' and substituting therefor the words 'Marquis or equal to Marquis'."

Now, if you going to separate Garnet into other grades altogether how are you going to permit of any mixture of Garnet in the number 2?

Mr. FRASER: Well, the Act schedule No. 1 the last column there headed "Wheats of other classes," allows 3 per cent in 2 Northern.

Mr. GARLAND: That won't be changed then?

Mr. FRASER: I understand not, so that a percentage of Garnet would still remain.

Mr. GARLAND: In other words, the percentage that is now permitted will still continue.

Mr. FRASER: That is the way I understand it.

Hon. Mr. STEVENS: No, no, Mr. Garland has got it wrong. It is very complicated. It is no reflection on anybody if they do not get the technique of it at once. I think I can explain it. The amendment to the Act does two things: It puts words in the section which will permit us to include Garnet in that class. In the next section, the schedule is the statutory grades with which you are all familiar. In the schedule as it now stands, number 2 Manitoba Northern consists of red spring wheat of good milling quality, but it will be noted that number 1 hard Manitoba and number 1 Manitoba Northern must be Marquis or equal to Marquis. Now then, we propose to simply change number 2 grade to the same as number 1 Northern and number 1 hard in so far as the character of the grain included in it is concerned, but not the quality, but in number 2, as we grade it, there will still be permitted 3 per cent of other wheats, you see.

Mr. VALLANCE: Equal to Marquis?

Hon. Mr. STEVENS: Not necessarily. For instance, the schedule allows 3 per cent of other grains to appear. I think everybody recognizes that 3 per cent is not a quantity that would be of any great effect. But it does change something, Mr. Garland. In the quantity that is now permitted, for instance, you could have 80 per cent Garnet.

Mr. GARLAND: What is the percentage permitted to-day in number 3?

Mr. FRASER: 100 per cent, and number 2 as well.

Mr. GARLAND: Under the new regulations you won't be able to.

Mr. FRASER: Why no. Not in 2.

Mr. GARLAND: And what in 3?

Mr. FRASER: No change in 3.

Mr. GARLAND: You are quite sure it does not change.

Mr. FRASER: Not 3. 2 is changed.

Mr. GARLAND: In other words, there can be 80 per cent of Garnet in number

Mr. FRASER: Yes, I would say so.

Mr. GARLAND: Number 3 Northern?

Mr. VALLANCE: What effect is that going to have on your number 3 in the world markets? That is your standard grade, and the number 1 and number 2 that are sold in the country I come from, but in England and in Europe where 3 is the standard grade you would be creating a condition there.

Mr. FRASER: I would not look at it that way at all. You set up standards for 1 and 2 Garnet, you will take probably 90 per cent of the Garnet into those grades that will not go into 3 at all.

Mr. C. M. HAMILTON called:

Mr. C. M. HAMILTON: Mr. Chairman, honourable Ministers, and gentlemen, I have here just a short statement which I have had typed out which I think, with your permission I will read.

The question of providing special grades for Garnet Wheat has received a good deal of consideration. The matter was gone into very thoroughly by the Committee on Agriculture & Colonization at the Session of 1932. As the report of the Committee is available, it does not appear necessary at this time to go into great detail. It is enough to say that, after numerous sessions of the Committee and hearing evidence from various interests, on May 19, 1932, the Select Standing Committee on Agriculture & Colonization submitted the following recommendations:—

Your committee, in view of the evidence presented before them, a printed copy of which is herewith presented to the House, present the following recommendations:

Your committee recommend that the Canada Grain Act be amended to make, operative for the Crop Year 1933-34, the recommendation of the Western Grain Standards Board, in so far as it relates to the grading of Garnet Wheat as contained in the Annual Report of the Board of Grain Commissioners for Canada for the year 1931. Provided that the said amendment shall have force and effect for the Crop Year 1933-34, unless the said Board, shall, after giving due consideration to the evidence given before your committee and conditions then existing, establish standards for the grading of Garnet Wheat for the said crop year, different from the standards recommended by the said report of 1931.

Your committee further recommend that one thousand copies of this Report and the evidence on which it is based be printed in Blue Book form for distribution to the growers of Garnet Wheat so that they may be more fully advised of the intended change in the Canada Grain Act.

In order to be more fully informed with regard to the attitude of the millers in Great Britain and on the European continent, the Chairman of the Board of Grain Commissioners, Mr. E. B. Ramsay, visited Europe in the Fall of 1932. The information which he secured was much in accord with the report submitted by Mr. L. H. Newman, Dominion Cerealists and Dr. F. J. Birchard, Chemist in charge of the Board's Grain Research Laboratory, who accompanied a trial shipment of Garnet Wheat to Europe in the year 1929. On these two occasions representatives of the Canadian Government went to Europe for the purpose of ascertaining the attitude of European millers towards Garnet Wheat and on each occasion it was found that the great bulk of opinion was in favour of grading Garnet separately.

Upon the return of the Chairman of the Board, a special meeting of the Western Committee on Grain Standards was called for the purpose of giving consideration to the setting up of special grades for Garnet Wheat. The



Committee met on Friday, January 27th, 1933, and adopted the following resolution:—

That the amendment to the Canada Grain Act to provide for separate grades for Garnet Wheat be passed at the present Session of Parliament, and that the time for putting these grades into effect be left to the discretion of the Board of Grain Commissioners, but that this committee recommend that these grades be put into effect as soon as practicable and not later than for the handling of the 1934 crop.

Conditions existing in the year 1933 did not appear to warrant making provision for separate grades for Garnet Wheat for the marketing of that year's crop. The Western Committee on Grain Standards met October 17th, 1933. The committee did not alter the decision arrived at in January of the same year. Therefore, to carry out the recommendations of the Western Committee on Grain Standards and the Committee on Agriculture and Colonization, the present bill to amend the Canada Grain Act has been submitted.

Now, Mr. Chairman, I think that is a review of the situation up to the present time. I may say that the Board of Grain Commissioners have never taken strong ground in connection with this matter of providing separate grades for Garnet wheat. We are not legislators except to the extent that we have been given authority under the provisions of the Canada Grain Act; but we have held it our duty from time to time to bring to the attention of the Minister of Trade and Commerce any information which comes to our attention with regard to the sale of Canadian wheat, or any other matter affecting the handling of the Canadian crop. To indicate the attitude of the Board on this question—I might refer you to the Board's report for the year 1933. The report to the Minister is dated January 8, 1934, and on the sixth page, under the heading "Amendments to the Canada Grain Act," I might direct your attention to this paragraph:—

The Board has continued to investigate the effect of allowing Garnet wheat to be placed in No. 2 Manitoba Northern wheat. We are substantially in agreement that Garnet wheat should be given an independent classification but in view of the present low price of wheat and the difficulties of the wheat producer, we are of the opinion that it might not be advisable to proceed with changes in the classification at the present session.

Now, that was the information that was transmitted to the Minister of Trade and Commerce by the Board of Grain Commissioners under date of January 8, 1934; and that is not so very long ago.

Hon. Mr. MOTHERWELL: And the present session means this session.

The WITNESS: This session.

Hon. Mr. MOTHERWELL: The Minister is not going on the advice of the Board, though.

The WITNESS: That is not the whole story. I am referring to this to show that the Board has not been unduly urging separate grades for Garnet wheat. But since that time certain communications have come to the attention of the Board. I think, Mr. Stevens, you have copies of these that were given to you yesterday. If you will let me have them. Certain communications came to the attention of the Board which we thought advisable to bring to the attention of the Minister; and as a result of the consideration of the question, and the additional information, the additional expressions of opinion that came to our attention through the National Research Council which was receiving reports from milling chemists in the Old Country during the past year; and also, as the Minister has pointed out, the communications from exporters in Vancouver and various other sources: In view of all these things which have

developed since the first of the year, it was thought advisable to submit the present amendment to the Act, making provision for separate grades for Garnet wheat. If you will just pardon me for a minute till I see if I can find these letters. Yes, I have them.

One is under date of February 16, 1934. It is from H. Horace Ward, Analytical and Consulting Chemist in England. This is a letter addressed to: W. F. Geddes, Esq., Board of Grain Commissioners, Grain Research Laboratory, 876 Grain Exchange Building, Winnipeg, Man. It is a communication that came directly to the officials in charge of the Grain Research Laboratory, conducted under the Board. I think I might read this letter:—

DEAR MR. GEDDES,—I have read your very interesting letter and am glad that you are finding my reports interesting.

The thing that startles me is to find Garnet creeping into the Atlantic wheats. This is a most serious thing. Millers in England are giving over buying Vancouver wheats, because of the Garnet trouble and although at the present time they are compelled to take Vancouvers, there will be a rush for Atlantics as soon as the season opens. You realize the difficulty we have with Garnet wheat. When you consider that it has to be milled with large proportions of soft wheats of the Plate and especially English types, and unless the Manitoba can be given a long mellowing period before blending with the English, the millers find it impossible to reduce the hard Garnet to flour without damaging the softer flours, and indeed in many cases a good proportion of the Garnet finds its way into the offal sack.

I am compelled to advise millers all over the country to keep off Vancouver wheats of any grade other than "I", as much as possible.

I think that you will ruin Canadian wheat trade in this country if Garnet is going to be included in all grades.

Some 4's look to me very much like a mixture of Garnet with what used to be 6's, so that this grade is becoming more and more troublesome for use as an addition to No. 1 for improving Gas Production.

Why is it that Garnet cannot be graded as a separate wheat? If this were done it would find, I think, good use in English mills because treated separately and given adequate moisture when conditioning it mills down very well and gives a fairly decent flour.

That is in answer, to some extent I think, to Mr. Garland's question.

Further, I think that after a preliminary damping it would be a useful wheat to lie up with damp English in those seasons when English wheats are badly harvested. (Normally 2 out of 3.) The slight preliminary damping of the Garnet would enable it to pick up the moisture from the English speedily.

At one time we used to depend on Karachis for this purpose, but latterly these have been off the market.

About gassing power—our determination of diastatic capacity is the ordinary yeast test. . . .

Then he goes on to say how it is done.

In England the miller has to satisfy bakers, some of whom use 4-hour and some 8-hour processes, so that a fairly wide fermentation tolerance is called for.

In Scotland the all night process is more in use, but there is a tendency towards shortening down in a good many cases. From the notes on fermentation tolerance in the meaning of terms, you will see how we manage to overcome the difficulties.

As regards our general tests, so far as I know, it is the only system which gives the separate strength factors. . . .

This is a technical matter as between milling chemists. That is one of the communications that came to the attention of the board since the annual report of the board, and was submitted to the minister.

*By Mr. Davies:*

Q. May I ask who Mr. Ward is; who does he represent?—A. This letter says he is analytical and consulting chemist. He advises a large number of mills in Great Britain in regard to the quality of wheat.

*By Hon. Mr. Motherwell:*

Q. Who is Mr. Geddes?—A. He is chemist in charge of the Board's research laboratory and Mr. Geddes sent it on to the Board, and we sent it to the minister; and after the chairman consulted with the minister, it was thought advisable to go ahead with these amendments to the act.

Q. What was the name of the man who wrote the letter?—A. H. Horace Ward.

*By Mr. Vallance:*

Q. I noticed when you were reading the report, the annual report of the Board of Grain Commissioners for Canada, you quoted this: "The board has continued to investigate the effect of allowing Garnet wheat to be placed in No. 2 Manitoba Northern wheat. We are substantially in agreement that Garnet wheat should be given an independent classification, but in view of the present low price of wheat and the difficulties of the wheat producer, we are of the opinion that it might not be advisable to proceed with changes in the classification at the present session." I want to know if the position is any different to-day. If that was the reason when this report was written, has that condition so changed now that this statement is not accurate?—A. No. I don't think the condition has changed any, substantially. But it would appear that the necessity for it is more urgent than we really thought when that report was transmitted.

*By Mr. Bowman:*

Q. It was prepared prior to your having the letter you have just read?—A. Yes. I have another one, which I would read. This is a letter signed by E. L. Lewis, of Charlton & Bagshaw, Corn Exchange, 9 Brunswick street, Liverpool, England, and it is dated April 10, 1934. It is also addressed to W. F. Geddes, Dominion Grain Research Laboratory, and is as follows:—

I am much obliged to you for sending me your seventh annual report and have read this with very much interest.

I have seen in to-day's papers that your House of Commons are introducing legislation to amend the Grain Act so that Garnet wheat will be graded separately. This, we think, is a step in the right direction as we have advocated this procedure here for some time and asked your representatives who were over here a year or two ago if this could not be done.

You will understand that in this country where we have wheats from all over the world, most of them lacking the strength of Manitoba, millers do not want wheat with Garnet, particularly when it is mixed, we will say, with Marquis or Reward. Recently your No. 2 Manitoba shipment from Vancouver has been practically 100 per cent Garnet, and the result has been a considerable lowering in price of this grade and in fact many millers would not buy Vancouver 2's at all. On the other hand, lower grades, particularly 4's and 5's have been in demand here because of their gassing properties. Recently, however, Garnet has been introduced into these grades and one of the biggest milling combines in this country told us only the other day that they were going to buy no



more No. 4 Manitobas as they contained too much Garnet and were going on 5's. However the next arrival of 5's also contained Garnet, so at the moment they do not quite know where they are.

I have written you at some length on this particular point as I do feel that it will be all to the good, both for yourselves and ourselves, if Garnet is kept out of your ordinary grades and marketed separately. The trouble here with Garnet is that it requires a different and separate treatment to your other grades of wheat and when it is mixed millers cannot do this without injuring the other types of wheat.

I shall always be glad to get your reports at any time as they are most interesting and useful.

This communication, as you see, came after the amendment to the Canada Grain Act had been introduced into parliament. But it was on the further representations that the board got, and information that came to its attention, and after discussing the matter with the minister that it was thought advisable to bring down the present amendment to the act.

*By Hon. Mr. Motherwell:*

Q. What was the date of your letter?—A. The last one was April 10, 1934.

Q. What was the date of the other one?—A. The first one was February 16, 1934.

*By Mr. Bowman:*

Q. I don't want to interrupt you, but Mr. Fraser stated that the millers in Canada were ceasing to use Garnet for milling purposes. Is that so?—A. I think the millers in Canada have never looked with favour upon Garnet wheat, and although I think they do use it to some extent, they get away from it as far as possible. I think the minister has on his file a letter from Mr. Black, president of the Ogilvie Flour Milling Company, approving the action that was being taken to provide separate grades for Garnet.

Q. Our own millers practically having the selection of the market, it would mean that the bulk of the Garnet is sold abroad?—A. That seems logical, yes.

Q. What portion of our Garnet is milled into flour by the home miller—what proportion?—A. Well, I would say about a fifth; say 50,000,000 bushels consumed at home and about 200,000,000 exported.

Q. No, milled at home?

The CHAIRMAN: There is more than that.

The WITNESS: Yes, milled. That is true. I could not give you that information.

Mr. VALLANCE: 75,000,000 bushels, I think.

The WITNESS: I could not give you that information.

Hon. Mr. STEVENS: I think it would be under 75,000,000 bushels.

*By Mr. Bowman:*

Q. Both for home consumption and export?—A. Yes.

*By Mr. Donnelly:*

Q. In the last communication you read, if I understand it correctly, they seemed to complain of Garnet in 3 and 4 just as much as they did in 2, didn't they?—A. Well, they complained of Garnet in 3 and 4, at any rate. I would not say as much as in 2, but they complained.

Q. But you didn't think it worth while to change the Canada Grain Act with regard to the grade of 4?—A. Well, one step at a time seems to be making pretty good progress.

Q. Though they are complaining, as that letter seems to indicate, more bitterly about 4 than they are of 2, yet you are changing the grade for 2, and not advising a change in the grade for 4?—A. Well, I don't think I can alter my statement very much; if you make one step at a time you are making progress, and it does give them another grade at least to select from, not containing an excess of Garnet.

*By Mr. Carmichael:*

Q. That is a point that I felt like raising, that Mr. Donnelly raised. At the present time Garnet wheat, we find, is getting into No. 2 in very large quantities, and it is prejudicing our European market. Here is a possible thing that we are up against, which we were up against back in 1928:—Our Marquis and our Reward wheat might be of low grade. In 1928 in my own district it all went grades 3, 4 and 5, and by this legislation we are just barring Garnet wheat from grade 2. In a year when we have possibly the major portion of our Reward and Marquis wheat in grades 3 and 4, we are going to crowd Garnet wheat into those grades, and we are up against the same thing as we are up against now, it seems to me. I suggest the legislation does not go far enough. I certainly favour the separate grading of Garnet wheat. I come from a district that produces almost exclusively Marquis wheat, and I favour the separate grading of Garnet. But it seems to me that the same restriction being placed on Garnet going into grade 2 should be placed on Garnet going into any other grade that Marquis or Reward wheat is going in?—A. I think if you would let me get along with the statement I have in mind, to some extent I shall endeavour to answer that. I might say to Mr. Carmichael just now, however, that when consideration was first given to the question, it was proposed to keep Garnet out of 3 as well as 2, but upon further consideration it was thought not advisable to go the full distance, or to go that whole distance at this session of parliament. I intended to say something about that a little later on.

*By Hon. Mr. Weir:*

Q. What percentage of Garnet is in 4?—A. I don't think we know.

Mr. FRASER: As regards any year like Mr. Carmichael speaks of, Garnet might be 100 per cent in No. 4. No. 4 might be 100 per cent Garnet.

Mr. VALLANCE: No, would it not be the other way, with your grading to-day, 100 per cent No. 2 because of the fact—

Mr. FRASER: It is 4 we are talking about.

Hon. Mr. STEVENS: The question related to No. 4.

Mr. FRASER: Yes. Some No. 4 shipments might easily be 100 per cent Garnet. Others of course would be less.

Hon. Mr. WEIR: On the whole, what would you say?

Mr. FRASER: It depends.

Hon. Mr. WEIR: Over a year, what proportion would be Garnet?

Mr. FRASER: Well, I could not very well answer that.

Hon. Mr. WEIR: There would not be very much, would there?

Mr. FRASER: No, there would not be very much. There has been very little No. 4.

*By Mr. Donnelly:*

Q. Referring to what Mr. Vallance said, in the years when you have early frost, when your Marquis would be frozen and your Garnet would not be, your Garnet would be in separate grades?—A. There would be separate grades.

Q. As they are graded now, not as they will be graded?—A. There is a reference made in one or two of these letters, making objection to No. 4. No. 4

this year, I think, will be largely Garnet; because the frozen stuff was in the north, in Peace River district and the north where the Garnet was grown.

The CHAIRMAN: I would suggest that you let Mr. Hamilton finish his statement.

The WITNESS: I think I may state to Mr. Weir that that point as with regard to the proportion of Garnet in number 4 would not be as important as with 1, 2 and 3.

Hon. Mr. WEIR: A large percentage goes into number 2?

The WITNESS: Yes. Growing tests have not been made in any grades under 3, but as everybody knows our wheat has been of a high quality during the past three or four years with the result that not much Garnet would be found in number 4.

*By Mr. Vallance:*

Q. It would be as distinguishable in number 4 as in number 2?—A. Undoubtedly.

Q. Why should you say you could not see what it was in number 4 and yet Mr. Fraser says it is so easily distinguishable that you can see what it is in number 2?—A. He said it could not be distinguished in number 4.

Q. The Minister asked you about percentages. You said it was not distinguishable because it had not been grown?—A. I said they have not looked for it in number 4.

Q. It has not been grown?—A. It has not been looked for in anything under 1 Hard and 1 Northern. The inspectors do not give any consideration to it. It is admitted in those grades.

Hon. Mr. WEIR: Would you say that 75 per cent of Garnet was put into number 2?

The WITNESS: Anything I might say in that regard would be only a guess.

Mr. FRASER: Yes, I would say so.

Hon. Mr. WEIR: Do you suppose 75 per cent of Garnet wheat grown was put into number 3 grade or higher in the past few years?

The WITNESS: Yes.

Hon. Mr. MOTHERWELL: Mr. Fraser, I understood you to say that the reason Garnet went into number 4 this year was because it was frozen in the north. What about the other varieties in the north?

Mr. FRASER: They were frozen too.

Hon. Mr. MOTHERWELL: Yes, a little worse.

The WITNESS: I think I might give a little attention to what is proposed in the Bill in order that it may be thoroughly understood. I might say that in the present Bill it is not proposed to make those grades of Garnet statutory. It is proposed to give the western committee on grain standards power to make special grades to cover Garnet or any other variety of wheat. Now, I know that might be open to some criticism. You might say: if you are going to grade Garnet separately why don't you make statutory grades and then parliament will know exactly what you are going to do? I would say that there is more or less of an experiment in connection with this thing. We think that the grades which are proposed will be satisfactory because they are almost identical with the grades of 1 and 2 in Hard Red Spring wheats, but, as you realize, it is easier to change a commercial grade than it is to change a statutory grade.

*By Mr. Garland:*

Q. Is not this a Hard Red Spring wheat too?—A. Yes, it is.



Q. Yes. So be careful because we are prejudicing Garnet wheat in the evidence?—A. Probably it was not very well expressed, but these grades are termed as such. It is Red Spring wheat. Statutory grades; all western grown Red Spring wheat included in schedule 1. The others, of course, will be Red Spring wheat but they are commercial grades, not statutory grades. That would be the distinction. Well, then, that is the reason it was thought advisable to give the western committee on grain standards this power rather than having it put in the Act at the present time. If they are found unsatisfactory they can be changed more readily; if they are found satisfactory, if parliament wishes, they can be made statutory at a later session. I might make some reference to the western committee on grain standards just to give the members of the committee some idea of whom it is composed and whether you can reasonably feel confident in delegating such authority to this committee. I would say that under the provisions of the Canada Grain Act grades 1 Hard, 1 Northern, 2 Northern, 3 Northern and 4 Northern are statutory grades. The western committee on grain standards has power to make other grades under special conditions. Frequently the committee sets up Five, Six, and sometimes Feed, and, then, sometimes where there are peculiarities in the crop—it might be where we had a crop of very large, plump, heavy wheat and frozen, but not immature—they have power to make a special grade; or if it was a thin wheat, a rusted wheat, for example, which was thin and light but still high in protein, if the committee saw fit they have power to make a grade to meet a situation of this kind. So it is thought that it is not delegating to the western committee on grain standards a very great deal of additional authority when it is proposed to give them authority to make special grades for Garnet wheat or any other variety if it might be thought advisable. The western committee on grain standards under section 25 of the Act consists of the following. This is the personnel: "The commissioners"—the three members of the Board of Grain Commissioners—"the chief grain inspector—the chairman of the grain appeal tribunals hereafter referred to, the chief chemist on the staff of the Board and the Dominion cerealist shall be ex-officio members of the Western Committee, and the Board shall nominate or arrange for the nomination as members, from among persons who are willing and able to act, of a representative of millers of wheat flour and of four representatives of the grain growers in Alberta, five of the grain growers in Saskatchewan, three of the grain growers in Manitoba, and one of the grain growers in British Columbia." This is the composition of the western committee on grain standards. If the committee desires I could proceed to give you the personnel, but if you do not care to take that much time I will pass that over by saying that the Board has endeavoured to make the representations from the various provinces as widespread as possible. I think the question has been raised: Have the growers of Garnet wheat any representation on the western committee on grain standard? And in answer to that question I might say that one of the growers' representatives from the province of Saskatchewan is Mr. George Canfield who lives northwest of the city of Prince Albert.

Hon. Mr. WEIR: He grows Reward wheat.

The WITNESS: Yes. Probably he does.

Hon. Mr. MOTHERWELL: And he was only recently put on.

The WITNESS: Yes. Only recently put on. From the province of Alberta there is Mr. George Bennett, a member of the board of directors of the Alberta Wheat Pool who lives in the area east of Edmonton and who I think is—I am not absolutely sure—I think he himself is a grower of Garnet wheat. Nevertheless, he lives in that district and his friends and neighbours are among the growers of Garnet wheat in the province of Alberta.

Mr. GARLAND: I am informed that Mr. Bennett grows Reward.

The WITNESS: I might say that since this matter was before the committee two years ago there are a great many farmers all over the northern portion of the prairie provinces who have been endeavouring to get out of Garnet and grow Reward or some other variety which is more suitable.

Mr. GARLAND: That is just the point. I submit if this legislation is passed, you are first of all going to prejudice shipments from Vancouver right away, until the separation of the grades becomes technically possible. Once the separation of the grades is made possible and shipments are of pure Garnet, that won't be the case, except in very small quantities. It would be fairer, now that the farmer has the grain in the ground, simply to notify him that next year you are going to put a ban on Garnet wheat, if you like, and give him a chance to switch to Reward. To do it now, when the grain is in the ground, is to work an injury on a large number of growers of Garnet wheat all over the western part of Canada.

The WITNESS: I think that is a matter for the consideration of the committee before the bill is finally disposed of.

*By Mr. Donnelly:*

Q. Those letters that you have received, complaining of the grading of wheat, do they complain chiefly of the Atlantic or the Pacific?—A. Mostly Pacific.

Q. Have you any complaints from the Atlantic?—A. We have had complaints that Garnet is appearing in eastern shipments.

Q. And the chief thing they complain about is what?—A. In the Garnet?

Q. Yes.—A. Well, that it does not mill well; it does not mill the same way; it requires different tempering.

Q. There is no complaint about its strength?—A. Yes, I think there is. I think undoubtedly Garnet is not as strong a wheat as Marquis or Reward, except in certain instances.

Q. I noticed in some of those letters it was said they had no complaint whatever of the strength, and the very next letter went on to complain about the strength. How do you account for this difference of opinion?—A. Yes—well, you know wheat varies from year to year, and from district to district, chiefly due to soil types and climatic conditions, to a very considerable extent. You might get a quantity of Garnet that would give very good results—you might get that in any variety, as a matter of fact—and you may get another quantity that would not give nearly as good results.

Q. Have you any evidence as to the amount of gluten content in Garnet wheat?—A. A lot of information has been secured in that regard, and unfortunately I do not think I have very much with me to-day. I have many opinions in that connection, but generally speaking grown under similar circumstances, except in the north where Marquis might produce starchy kernels, which would be very low in protein, probably as low as 8 per cent, but grown alongside of Reward, one of the newer wheats, even in the north, in a great majority of cases I think you will find that Garnet is lower in protein than Reward.

Mr. DONNELLY: Mr. Chairman, I brought this up because I think we should have evidence in regard to the gluten content of those wheats before us, so as to be able better to judge of the nature of this wheat; because I understood from some of the letters which Mr. Stevens read to the committee, they are complaining about the strength, and others were praising it because it was very strong—there was no complaint whatever about the strength. Now, I think we should have all the information we can get in that regard.

Hon. Mr. STEVENS: Dr. Donnelly, to have the matter clearly and fairly before us, I think the major complaint is not in regard to the strength of

Garnet. The major complaint is in regard to the temper—that is the term used. In the tempering of Garnet wheat, a different process has to be used as compared with other wheats.

Mr. DONNELLY: That is just what I am pointing out, Mr. Chairman. It is not the strength of the Garnet, it is the temper. It takes a little longer time to be tempered to make good milling wheat. That is the whole complaint.

Mr. CARMICHAEL: I thought you were going to tell us that the board recommended either the changing in grade 2—

The WITNESS: I have not got to that yet, Mr. Carmichael.

Mr. CARMICHAEL: You have not reached that?

The WITNESS: No.

Mr. MOTHERWELL: You are not through?

The WITNESS: No.

Mr. CARMICHAEL: I shall be glad to hear your view on that.

The WITNESS: I was going to refer to the sections of the act. Section 1. It is proposed in section 1, line 15, to add "or varieties." When the board gave consideration to making separate grades for Garnet wheat, there seemed to be some doubt as to whether the western committee on grain standards had actually authority under the act, as it stood, to take such action. For that reason, section 1 has been introduced.

It is an amendment to section 26 of the Act, where it is proposed the committee, "shall cause to be prepared tentative standard samples of the statutory grades of western grain and of such commercial grades as it appears likely to be convenient to establish owing to the probability that the crop will include a substantial quantity of certain kinds or varieties. . . ."

Now, there seems to be some doubt as to whether the western committee could make special grades for different varieties, and therefore the words "or varieties" have been added. In section 2 you ask whether we are going to take Garnet out of No. 2 grade or No. 3. This is what is proposed under section 2:—

Schedule 1 of the said act is amended by striking out the words "Red Spring Wheat of good milling quality" in No. 2 Manitoba Northern under the main heading of "Variety of grain" and substituting therefor the words "Marquis or equal to Marquis."

Well now the act, in schedule 1, where these grades are described, "No. 1 hard" under the heading "Variety" says, "Marquis or equal to Marquis," No. 1 Northern Marquis or equal to Marquis, No. 2 Manitoba Northern says "Red Spring Wheat of good milling quality." Now, at the present time, Garnet and a number of other varieties could come in there. A sample of wheat might be 100 per cent Garnet and grade No. 2 Northern at the present time. It is proposed to strike that out and put "Marquis or equal to Marquis," so that under that definition Garnet would be excluded from No. 2 Manitoba Northern. The question is, why don't you change also No. 3 Northern which grades not quite so high as No. 2, where it says: "Spring wheat of good milling quality" to "Spring wheat of fair milling quality." Well, there are a number of considerations. I might say, frankly, I am not too confident that Garnet wheat graded separately will bring as much as No. 2 Northern wheat at the beginning until it has been tried out and its value has been established—I am not sure.

*By Hon. Mr. Weir:*

Q. Can you give us what the opinion of the trade would be on that?—A. As to whether it would bring—I really can not say what the trade opinion is, but personally, I would not be too confident that it would bring as much as No 2 Northern, but we recognize that Garnet wheat has some very decided advantages from the growers' point of view. It ripens earlier than most other



wheats that we have. It is a good yielder and it does not piebald or produce starchy kernels in northern points. In addition to that, these are very difficult times, and there is no desire to penalize the growers of grain any more than is absolutely necessary in the circumstances. Now, as I said earlier, in this session, if you are going toward an objective, one step at a time is pretty good progress. I quite realize the point that has been raised by Mr. Carmichael and maybe some others. There is a real danger, if we had a frozen crop, or the crop had been injured from some other cause, we might find ourselves in the position where we would have very little wheat higher than No. 3 Northern, consequently we might find ourselves with very little wheat that is not mixed with Garnet, but we know in the west that if we make this change at the present time that we are making some progress, we are moving. I do not agree with Mr. Vallance when he says that No. 3 is the grade of wheat that sets the price, that sets the standard of the Canadian wheat in the European markets.

MR. VALLANCE: I will qualify that. I think you will agree with me that the Argentine crop is marketed on the F.A.Q., which is equal to our No. 3. And the competition you meet is not No. 3 grade, or No. 1, or No. 2, but Argentine F.A.Q., which is equal to our No. 3. That is the reason I said that.

THE WITNESS: I was in the Old Country in 1928, in Manchester, Liverpool and London, and looking over the wheats in the various grain exchanges there, I think I made a remark when I saw the wheat from the Argentine that it looked like our No. 3; but that is not the wheat that sets the standard of your Canadian wheat in the Old Country. I think it is the No. 1 Northern. I think, undoubtedly, the premium that is paid for Canadian wheat in the British market is the difference between that No. 3 Northern and the Plate wheat, the Argentine wheat, and our No. 1 Northern wheat. I am not disposed to accept that statement.

*By Mr. Vallance:*

Q. Let me ask you this question: Into what grade does the greatest bulk of the Canadian wheat grade?—A. I have not those figures on the various grades from year to year. I think probably in the last three or four years you will find a large percentage of our wheat graded No. 1 hard, No. 1 Northern, and No. 2 Northern.

THE CHAIRMAN: We have only five minutes left, Mr. Hamilton.

THE WITNESS: I think I can finish. I think I have pretty well answered the question why it is not advisable to exclude it from No. 3 as well as No. 2. At the present time, there are large quantities of wheat in store in our terminal elevators, as you know, and in country elevators. Which will probably get into the terminal elevators as fast as the grain companies can get it, and possibly before the several grades would come into operation, if they do. The practice of the manager of the terminal elevator, when he receives wheat into his elevator, is to issue warehouse receipts for it, in which he recognizes delivery into his elevator of a certain quantity of wheat of a certain grade; and he agrees to deliver out a similar quantity of wheat of a similar grade. Now, that is going to be a penalty on the operators of the terminal elevators, and if you put Garnet out of two grades, instead of one, you probably double or more than double the penalty that is going to be imposed on the terminal elevators in that connection.

MR. VALLANCE: They can stand a little loss just as well as farmers.

THE WITNESS: I am not arguing the interest of the terminal elevators; but again I say, if you make one step at a time when you are proceeding towards a goal, you are making progress.

HON. MR. MOTHERWELL: One at a time is good fishing.

THE WITNESS: In the past crop year, we had one Manitoba hard, 8·23 per cent; one Northern 46·78 per cent; 2 Northern 29·49 per cent; and No. 3 8·5, a very high quality crop undoubtedly.

Hon. Mr. MOTHERWELL: Not all due to Garnet.

The WITNESS: No. With regard to the quantities, I think that has been sufficiently discussed. I might say that I have a statement here that shows the quantities, and I think the analysis that was made by Mr. Newman, the Dominion Cerealists, shows the quantity, to a very large extent, that is going into the different top grades, 1, 2 and 3 Northern. There is just one other question that I should like to deal with, and that is in regard to the inspection department making a classification, because after all, that is a very important consideration.

A few years ago, I remember reading a report in which very great doubt was cast upon the ability of Mr. Fraser and his men to tell Garnet wheat from other varieties, and classify it; but the test which was made probably over two years ago, a report of which was submitted to this committee two years ago, I think, clearly indicates that the inspection department are able to make the classification. I have here a report from Mr. Newman.

Hon. Mr. WEIR: Country elevator men?

The WITNESS: No, inspectors, government inspectors.

Hon. Mr. WEIR: Mixed in the country elevators?

The WITNESS: Yes, as it would come in carload lots.

Hon. Mr. WEIR: If it were distinguished in the country elevator, but the wheat would be mixed with different strains of wheat before it would get to the shipping point.

The WITNESS: Yes. If that happened, the grower must take pains to keep it separate, and if the operator of the country elevator does not take pains—

Hon. Mr. WEIR: Could he, after he had taken delivery of the wheat? You know, a lot of the wheat is delivered in rain and snow and at night time—

The WITNESS: There will be mixtures, undoubtedly, but it will be a difficult job for the country elevators. I want to quote one paragraph from Mr. Newman's letter. Mr. Newman is Dominion Cerealists, and the letter is written to the chairman of the board, under date of October 13, 1933.

It is again interesting to note that your inspection service appears to be remarkably successful in keeping Garnet out of No. 1. It is also interesting to note that approximately twice as much Garnet is included in No. 2 ex-Vancouver as in the cargoes leaving Fort William.

Now, there is just one other question, and that is the matter of finding a market, or assisting in the marketing of Garnet wheat, this is a recommendation of the Chairman of the Board. I think it was from his observations and his conversations with millers and dealers when he was in the Old Country in the Fall of 1932, that a considerable quantity of Garnet Wheat should be sent to the British Isles and the Continent to make real milling tests. It is true, that in 1929 some 7,000 bushels or more were sent over, but I think that was divided up into comparatively small lots, probably not greater than 500 bushels, which would not be capable of making more than experimental tests. But it is proposed—I am not sure that the Minister has yet agreed to this—but the suggestion has been made that considerable quantities, say quantities of 16,000 bushels and 20,000 bushels might be allocated to a mill, and this would probably be mixed with home grown wheat and wheat from other countries at the rate of 20 per cent Garnet, making a quantity of 100,000 bushels in order to make a real milling test. Now, that would not be a complete loss. The Canadian government would not have to stand the whole cost because the millers would be willing to pay for the wheat based on what they were able to get for it.

I think this is as far as I had intended to go probably. Mr. Fraser and myself will be here during the sittings of the committee, and if there is any in-

formation which we will be able to give we will be very glad to do so. I thought it advisable that I should give this information to the committee to-day.

The CHAIRMAN: I understand Mr. Weir wishes to make a statement.

Hon. Mr. WEIR: One would gather from hearing the evidence this morning that there was only one side to this whole problem. It takes us back to when we had our other investigation and the Chairman of the Board of Grain Commissioners stated then that the price paid was the proof of the pudding, and I think that influenced a goodly number of the members of the committee at that time, and yet immediately afterwards the spread then between 1 and 2 was a much lesser spread. All I want to say is this: If we are to grade we do not want to let anything come in that is injurious to the reputation of our wheat in the world markets. The evidence that has been submitted here shows that there is a preponderance of Garnet Wheat in Vancouver. The spread between 1 and 2 in Vancouver, for instance, is less for seven months than the spread between 1 and 2 in Montreal.

I feel, that if we decide to have separate grades for Garnet, that the important thing is to see that there is indisputable evidence given to the farmers in western Canada, outside of letters from millers and the trade who demonstrated in their evidence before that they would stand to gain a little bit by Garnet being put into a separate grade. Therefore, I think that we cannot go too carefully, and we should not spare any expense to bring the best possible authorities here before we make a decision on this question.

The WITNESS: I might say I have a complete statement of the prices of Vancouver 1 Northern and 2 Northern, and Winnipeg 1 Northern and 2 Northern, from 1st September, 1931, to May 31, 1932, which I could file if you so desire.

Hon. Mr. WEIR: I would suggest, Mr. Hamilton, that you file it from 1925, both for Winnipeg and Vancouver.

The WITNESS: I cannot go back that far.

The CHAIRMAN: Does the committee want that incorporated in the evidence?

Mr. DONNELLY: Yes, I think the information is very valuable.

The CHAIRMAN: All right, then it will be included in the evidence.

PRICES OF No. 1 AND 2 NORTHERN WHEAT AT WINNIPEG AND VANCOUVER BY MONTHS FOR YEARS 1924 TO 1931

(Dominion Bureau of Statistics, Agricultural Branch)

—	Winnipeg Prices			Vancouver Prices		
	Basis Fort William and Port Arthur					
	No. 1 Nor.	No. 2 Nor.	Spread	No. 1 Nor.	No. 2 Nor.	Spread
	per bush.	per bush.	per bush.	per bush.	per bush.	per bush.
1924						
January.....	96.5	93.5	3.0			
February.....	99.7	96.7	3.0			
March.....	98.0	95.0	3.0			
April.....	98.3	95.2	3.1			
May.....	104.3	100.9	3.4			
June.....	114.0	110.5	3.5			
July.....	135.3	131.7	3.6			
August.....	143.5	137.3	6.2			
September.....	142.2	138.6	3.6			
October.....	159.6	155.2	4.4			
November.....	164.0	158.7	5.3			
December.....	172.7	167.4	5.3			
Average.....			3.9			



PRICES OF No. 1 AND 2 NORTHERN WHEAT AT WINNIPEG AND VANCOUVER BY  
MONTHS FOR YEARS 1924 TO 1931—Continued

(Dominion Bureau of Statistics, Agricultural Branch)

	Winnipeg Prices			Vancouver Prices		
	Basis Fort William and Port Arthur					
	No. 1 Nor.	No. 2 Nor.	Spread	No. 1 Nor.	No. 2 Nor.	Spread
	per bush.	per bush.	per bush.	per bush.	per bush.	per bush.
<b>1925</b>						
January.....	196.2	189.9	6.3			
February.....	196.4	191.0	5.4			
March.....	176.3	171.3	5.0			
April.....	155.9	151.3	4.6			
May.....	182.4	179.2	3.2			
June.....	171.3	167.2	4.1			
July.....	162.0	158.8	3.2			
August.....	167.5	163.9	3.6			
September.....	137.5	134.7	2.8			
October.....	127.0	124.6	2.4			
November.....	142.2	138.7	3.5			
December.....	157.0	153.2	3.8			
Average.....			3.6			
<b>1926</b>						
January.....	156.5	151.0	5.5			
February.....	154.7	149.3	5.4			
March.....	148.4	142.9	5.5			
April.....	156.9	150.7	6.2	157.5	151.8	5.8
May.....	153.8	149.5	4.3	152.5	147.7	5.0
June.....	153.1	148.9	4.2	149.5	144.9	4.9
July.....	159.6	154.2	5.4	Market suspended from June 8 to Sept. 1, 1926		
August.....	151.0	146.3	4.7			
September.....	143.8	138.5	5.3	143.1	139.1	4.0
October.....	143.5	139.6	3.9	144.1	141.5	3.3
November.....	141.0	136.2	4.8	141.1	134.8	6.5
December.....	133.4	129.2	4.2	136	132.6	3.4
Average.....			4.9			4.7
<b>1927</b>						
January.....	135.7	130.9	4.8	138	134.2	3.8
February.....	139.7	135.1	4.6	141.2	138.6	5.1
March.....	142.7	137.6	5.1	143.7	139.7	4.1
April.....	145.1	141.2	3.9	145	141.3	3.7
May.....	155.8	152.3	3.5	155.3	151.7	3.8
June.....	161.1	156.9	4.2	159	154.5	
July.....	162.1	158.3	3.8	Cash market suspended June 7 to Aug. 30		
August.....	159.9	154.9	5.0	142.1	137.7	4.5
September.....	145.1	140.9	4.2	138.1	134.7	3.9
October.....	144.1	137.1	7.0	139.1	132.9	6.8
November.....	145.1	138.2	6.9	141.1	135.3	5.9
December.....	140.6	135.4	5.2	145.1	140.2	5.0
Average.....			5.0			4.4
<b>1928</b>						
January.....	142.8	136.7	6.1	148.1	139.9	8.3
February.....	142.6	136.9	5.7	147.1	136.9	10.2
March.....	148.1	142.8	5.3	152	143.3	8.9
April.....	156.3	151.5	4.8	157.7	151.2	5.9
May.....	157.2	150.7	6.5	156.5	147.5	8.8
June.....	142.6	137.5	5.1	145	135.4	10.4
July.....	130.9	127.1	3.8	134.1	125.2	9.5
August.....	118.8	115.9	2.9	118.1	111.2	6.9
September.....	117.0	111.9	5.1	115.3	110.2	5.1
October.....	123.7	117.0	6.7	121.4	117.9	3.5
November.....	120.9	115.8	5.1	120.2	117.0	3.2
December.....	117.1	113.5	3.6	118.0	115.3	2.7
Average.....			5.0			7.0

PRICES OF No. 1 AND 2 NORTHERN WHEAT AT WINNIPEG AND VANCOUVER BY MONTHS FOR YEARS 1924 TO 1931

(Dominion Bureau of Statistics, Agricultural Branch)

	Winnipeg Prices			Vancouver Prices		
	Basis Fort William and Port Arthur					
	No. 1 Nor.	No. 2 Nor.	Spread	No. 1 Nor.	No. 2 Nor.	Spread
1929	per bush.	per bush.	per bush.	per bush.	per bush.	per bush.
January	120.9	116.7	4.2	121.6	118.8	2.8
February	127.9	124.5	3.4	129.1	126.6	2.5
March	127.0	123.6	3.4	125.4	123.3	2.1
April	122.8	119.6	3.2	120.5	118.4	2.1
May	113.3	110.2	3.1	111.3	108.0	3.3
June	118.3	115.3	3.0	116.3	113.4	2.9
July	159.9	156.9	3.0	154.0	151.0	3.0
August	158.0	154.4	3.6	156.2	154.0	2.2
September	149.5	146.6	2.9	145.6	142.6	3.0
October	141.4	138.4	3.0	138.5	136.0	2.5
November	133.0	130.3	2.7	133.7	130.8	2.9
December	137.8	135.0	2.8	137.3	134.3	3.0
Average			3.2			2.7
1930						
January, in store	130.5	127.6	2.9	130.1	127.3	2.8
February	117.4	114.1	3.3	117.5	107.2	10.3
March	106.2	103.3	2.9	105.6	104.2	1.4
April	109.8	106.8	3.0	108.7	106.6	2.1
May	107.9	105.6	2.3	107.1	104.3	2.8
June	103.2	100.5	2.7	102.0	99.0	3.0
July	95.1	92.8	2.3	94.7	91.7	3.0
August	92.5	90.6	1.9	91.4	88.8	2.6
September	78.1	75.8	2.3	75.9	74.1	1.8
October	72.5	69.8	2.7	71.5	68.8	2.7
November	64.4	62.0	2.4	64.6	61.4	3.2
December	55.4	52.6	2.8	56.3	52.8	3.5
Average			2.5			2.6
1931						
January	53.9	51.2	2.7	54.5	51.6	2.9
February	59.3	57.0	2.3	61.1	58.0	3.1
March	56.7	54.4	2.3	57.2	53.3	3.9
April	59.7	57.2	2.5	57.4	54.2	3.2
May	60.6	57.8	2.8	59.5	56.3	3.2
June	60.8	57.7	3.1	58.7	62.2	6.5
July	57.3	54.3	3.0	55.4	50.5	4.9
August	55.1	51.0	4.1	52.9	48.3	4.6
September	53.6	49.5	4.1	52.3	46.8	5.5
October	59.9	54.5	5.4	57.6	51.7	5.9
November	67.1	61.6	5.5	65.3	58.3	7.0
December	60.6	56.1	4.5	60.9	54.7	6.2
Average			3.5			4.7

CASH PRICES OF Nos. 1 AND 2 NORTHERN WHEAT AT WINNIPEG AND VANCOUVER, BY MONTHS, FOR THE YEARS 1932, 1933 AND 1934 TO DATE

(Dominion Bureau of Statistics, Agricultural Branch)

1932						
January	59.9	55.7	.....	61.3	55.4	.....
February	63.2	59.2	.....	63.4	58.6	.....
March	62.9	59.0	.....	62.6	57.4	.....
April	62.6	58.8	.....	60.7	56.5	.....
May	62.9	59.3	.....	60.5	52.7	.....
June	55.1	51.9	.....	52.6	49.5	.....
July	54.7	51.7	.....	51.6	48.8	.....
August	56.3	53.5	.....	53.9	51.4	.....
September	51.9	49.5	.....	49.6	48.3	.....
October	48.2	46.4	.....	45.8	44.8	.....
November	46.7	45.2	.....	46.2	45.1	.....
December	42.4	39.9	.....	43.2	41.4	.....
Average	55.6	52.5	3.1	54.3	50.8	3.5

CASH PRICES OF Nos. 1 AND 2 NORTHERN WHEAT AT WINNIPEG AND VANCOUVER  
BY MONTHS FOR YEARS 1932, 1933 and 1934 TO DATE  
(Dominion Bureau of Statistics, Agricultural Branch)

	Winnipeg Prices			Vancouver Prices		
	Basis Fort William and Port Arthur					
	No. 1 Nor.	No. 2 Nor.	Spread	No. 1 Nor.	No. 2 Nor.	Spread
	per bush.	per bush.	per bush.	per bush.	per bush.	per bush.
1933						
January.....	44.2	42.0	.....	45.3	45.8	.....
February.....	45.6	43.9	.....	45.9	44.6	.....
March.....	49.2	47.3	.....	49.1	47.0	.....
April.....	53.6	51.9	.....	52.4	50.0	.....
May.....	63.3	62.0	.....	61.4	59.5	.....
June.....	66.8	65.3	.....	64.8	63.0	.....
July.....	83.4	81.0	.....	82.2	79.5	.....
August.....	73.4	71.3	.....	61.6	68.6	.....
September.....	67.2	65.1	.....	64.9	62.5	.....
October.....	60.5	57.8	.....	57.3	54.0	.....
November.....	63.7	60.9	.....	61.7	57.6	.....
December.....	62.7	57.3	.....	59.8	55.3	.....
Average.....	61.1	58.7	2.4	58.87	57.1	1.8
1934						
January.....	65.0	62.0	.....	64.7	59.9	.....
February.....	65.6	62.6	.....	65.7	59.5	.....
Average.....	65.3	62.3	3.0	65.2	59.7	5.5

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
1931						
September 1.....	53 <sup>1</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>3</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>
2.....	51 <sup>1</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>
3.....	51 <sup>1</sup> / <sub>8</sub>	46 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>
4.....	52	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>8</sub>	49	4 <sup>1</sup> / <sub>4</sub>
5.....	52 <sup>1</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>3</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>
8.....	—	—	—	52 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>
9.....	51 <sup>1</sup> / <sub>8</sub>	45 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	52 <sup>1</sup> / <sub>8</sub>	48 <sup>1</sup> / <sub>8</sub>	4
10.....	51 <sup>3</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	52 <sup>1</sup> / <sub>8</sub>	48 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>
11.....	52 <sup>3</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
12.....	51 <sup>3</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	52 <sup>7</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>
14.....	51 <sup>7</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>
15.....	51 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4
16.....	52 <sup>1</sup> / <sub>2</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	49 <sup>3</sup> / <sub>8</sub>	4
17.....	51 <sup>7</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>8</sub>	4
18.....	51 <sup>1</sup> / <sub>2</sub>	45 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	4
19.....	51	45 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	52	48 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>
21.....	52 <sup>3</sup> / <sub>4</sub>	47	5 <sup>3</sup> / <sub>4</sub>	53 <sup>3</sup> / <sub>4</sub>	50	3 <sup>3</sup> / <sub>4</sub>
22.....	54 <sup>1</sup> / <sub>2</sub>	49	5 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	51 <sup>1</sup> / <sub>2</sub>	3 <sup>5</sup> / <sub>8</sub>
23.....	53 <sup>1</sup> / <sub>2</sub>	48	5 <sup>1</sup> / <sub>2</sub>	54 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>2</sub>	3 <sup>5</sup> / <sub>8</sub>
24.....	53 <sup>3</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>4</sub>	51 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>
25.....	53 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	55 <sup>3</sup> / <sub>8</sub>	51 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>
26.....	53 <sup>1</sup> / <sub>2</sub>	48	5 <sup>1</sup> / <sub>2</sub>	54 <sup>1</sup> / <sub>2</sub>	51	3 <sup>1</sup> / <sub>2</sub>
28.....	52 <sup>7</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>8</sub>	50 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
29.....	52 <sup>1</sup> / <sub>8</sub>	46 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>8</sub>	49 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>
30.....	52 <sup>3</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>8</sub>	50 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>
October 1.....	51 <sup>1</sup> / <sub>2</sub>	46 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	49 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>
2.....	51 <sup>3</sup> / <sub>4</sub>	46 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	49	4
3.....	52 <sup>1</sup> / <sub>4</sub>	46 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	54	50	4
5.....	51 <sup>1</sup> / <sub>4</sub>	45 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>4</sub>	49	4 <sup>1</sup> / <sub>4</sub>



COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
October 1931						
6	52 $\frac{5}{8}$	47 $\frac{1}{8}$	5 $\frac{1}{2}$	54 $\frac{7}{8}$	50 $\frac{3}{8}$	4 $\frac{1}{2}$
7	51 $\frac{1}{2}$	46 $\frac{1}{2}$	5 $\frac{1}{2}$	54 $\frac{1}{2}$	49 $\frac{1}{2}$	4 $\frac{1}{2}$
8	52	46 $\frac{1}{2}$	5 $\frac{1}{2}$	55 $\frac{1}{2}$	50 $\frac{1}{2}$	5
9	53 $\frac{1}{2}$	48 $\frac{1}{2}$	5 $\frac{1}{2}$	56 $\frac{1}{2}$	51	5 $\frac{1}{2}$
10	54 $\frac{1}{2}$	49 $\frac{1}{2}$	6	57 $\frac{3}{4}$	52	5 $\frac{3}{4}$
13	55 $\frac{1}{2}$	49 $\frac{1}{2}$	6	59	52 $\frac{3}{4}$	6 $\frac{1}{4}$
14	55 $\frac{1}{2}$	49 $\frac{1}{2}$	5 $\frac{1}{2}$	58 $\frac{1}{2}$	52 $\frac{1}{2}$	6
15	55 $\frac{1}{2}$	49 $\frac{1}{2}$	5 $\frac{1}{2}$	57 $\frac{5}{8}$	51 $\frac{5}{8}$	6
16	56	50 $\frac{1}{2}$	5 $\frac{1}{2}$	59 $\frac{1}{2}$	52 $\frac{1}{2}$	6 $\frac{1}{2}$
17	56 $\frac{7}{8}$	51 $\frac{1}{2}$	5 $\frac{1}{2}$	60	53 $\frac{1}{2}$	6 $\frac{1}{2}$
19	58 $\frac{1}{2}$	52 $\frac{3}{4}$	5 $\frac{1}{2}$	61 $\frac{1}{8}$	55 $\frac{3}{8}$	6 $\frac{1}{2}$
20	59	53 $\frac{1}{2}$	6 $\frac{1}{2}$	—	—	—
21	60 $\frac{1}{2}$	54	6 $\frac{1}{2}$	62 $\frac{1}{2}$	56 $\frac{1}{2}$	5 $\frac{1}{2}$
22	59 $\frac{1}{2}$	53 $\frac{1}{2}$	6 $\frac{1}{2}$	61 $\frac{5}{8}$	56 $\frac{1}{8}$	5 $\frac{1}{2}$
23	61	54 $\frac{1}{2}$	6 $\frac{1}{2}$	62	57 $\frac{1}{2}$	5 $\frac{1}{2}$
24	62 $\frac{1}{2}$	56 $\frac{1}{2}$	6 $\frac{1}{2}$	63 $\frac{1}{2}$	58 $\frac{1}{2}$	5 $\frac{1}{2}$
26	61 $\frac{1}{2}$	54 $\frac{3}{8}$	6 $\frac{1}{2}$	62 $\frac{3}{4}$	57 $\frac{1}{2}$	5 $\frac{1}{2}$
27	63	56 $\frac{1}{2}$	6 $\frac{1}{2}$	64 $\frac{1}{2}$	59	5 $\frac{1}{2}$
28	63 $\frac{1}{2}$	56 $\frac{1}{2}$	6 $\frac{1}{2}$	64 $\frac{1}{2}$	59 $\frac{1}{2}$	5
29	64	57 $\frac{5}{8}$	6 $\frac{1}{2}$	65 $\frac{1}{8}$	60 $\frac{3}{8}$	5 $\frac{1}{2}$
30	66	60 $\frac{1}{2}$	6 $\frac{1}{2}$	69	63 $\frac{1}{2}$	5 $\frac{1}{2}$
31	68 $\frac{1}{2}$	61 $\frac{1}{2}$	6 $\frac{1}{2}$	70 $\frac{1}{2}$	64 $\frac{1}{2}$	5 $\frac{1}{2}$
November 2	—	—	—	72 $\frac{1}{2}$	67 $\frac{1}{2}$	5 $\frac{1}{2}$
3	69 $\frac{1}{2}$	62 $\frac{1}{2}$	6 $\frac{1}{2}$	71 $\frac{1}{2}$	65 $\frac{3}{8}$	5 $\frac{1}{2}$
4	71 $\frac{1}{2}$	64 $\frac{1}{2}$	6 $\frac{1}{2}$	72 $\frac{1}{2}$	67 $\frac{1}{2}$	5 $\frac{1}{2}$
5	71 $\frac{1}{2}$	64 $\frac{1}{2}$	7 $\frac{1}{2}$	73 $\frac{1}{2}$	67 $\frac{1}{2}$	5 $\frac{1}{2}$
6	71 $\frac{1}{2}$	64 $\frac{1}{2}$	7 $\frac{1}{2}$	73 $\frac{1}{2}$	67 $\frac{3}{4}$	5 $\frac{1}{2}$
7	70 $\frac{1}{2}$	63 $\frac{1}{2}$	7 $\frac{1}{2}$	72 $\frac{1}{2}$	67 $\frac{1}{2}$	5 $\frac{1}{2}$
9	70 $\frac{1}{2}$	63 $\frac{5}{8}$	7 $\frac{1}{2}$	72 $\frac{1}{2}$	66 $\frac{1}{2}$	5 $\frac{1}{2}$
10	67 $\frac{1}{2}$	60 $\frac{1}{2}$	7 $\frac{1}{2}$	69	64 $\frac{1}{2}$	5 $\frac{1}{2}$
12	65 $\frac{1}{2}$	58 $\frac{1}{2}$	7 $\frac{1}{2}$	67 $\frac{1}{2}$	62 $\frac{1}{2}$	5 $\frac{1}{2}$
13	63 $\frac{1}{2}$	55 $\frac{1}{2}$	7 $\frac{1}{2}$	65 $\frac{1}{2}$	59 $\frac{1}{2}$	5 $\frac{1}{2}$
14	61 $\frac{1}{2}$	53 $\frac{1}{2}$	7 $\frac{1}{2}$	63 $\frac{1}{2}$	57 $\frac{1}{2}$	5 $\frac{1}{2}$
16	64 $\frac{1}{2}$	57 $\frac{1}{2}$	7	66	60 $\frac{1}{2}$	5 $\frac{1}{2}$
17	66 $\frac{1}{2}$	59 $\frac{1}{2}$	6 $\frac{1}{2}$	68	63 $\frac{1}{2}$	5 $\frac{1}{2}$
18	64 $\frac{1}{2}$	58	6 $\frac{1}{2}$	66 $\frac{1}{2}$	61 $\frac{1}{2}$	5 $\frac{1}{2}$
19	66 $\frac{1}{2}$	59 $\frac{3}{4}$	6 $\frac{1}{2}$	68	62 $\frac{3}{4}$	5 $\frac{1}{2}$
20	63	56 $\frac{1}{2}$	6 $\frac{1}{2}$	65 $\frac{1}{2}$	59 $\frac{1}{2}$	5 $\frac{1}{2}$
21	64	57 $\frac{1}{4}$	6 $\frac{1}{2}$	66	60 $\frac{1}{2}$	5 $\frac{1}{2}$
23	62	55 $\frac{1}{2}$	6 $\frac{1}{2}$	64 $\frac{1}{2}$	58 $\frac{1}{2}$	5 $\frac{1}{2}$
24	63 $\frac{1}{2}$	56 $\frac{1}{2}$	6 $\frac{1}{2}$	65	59 $\frac{1}{2}$	6
25	60 $\frac{1}{2}$	54	6 $\frac{1}{2}$	63 $\frac{1}{2}$	57 $\frac{1}{2}$	6
26	59 $\frac{1}{2}$	53	6 $\frac{1}{2}$	62 $\frac{1}{2}$	56 $\frac{1}{2}$	6 $\frac{1}{2}$
27	58	51 $\frac{1}{2}$	6 $\frac{1}{2}$	60 $\frac{1}{2}$	54 $\frac{1}{2}$	5 $\frac{1}{2}$
28	57 $\frac{3}{4}$	51	6 $\frac{3}{4}$	60	54 $\frac{1}{2}$	5 $\frac{1}{2}$
30	60 $\frac{1}{2}$	53 $\frac{1}{2}$	7	62 $\frac{1}{2}$	56 $\frac{1}{2}$	6
December 1	61 $\frac{1}{2}$	54 $\frac{1}{2}$	7	63 $\frac{1}{2}$	57 $\frac{1}{2}$	5 $\frac{1}{2}$
2	60 $\frac{1}{2}$	53 $\frac{1}{2}$	6 $\frac{1}{2}$	61 $\frac{1}{2}$	56	5 $\frac{1}{2}$
3	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6 $\frac{1}{2}$	62	56 $\frac{1}{2}$	5 $\frac{1}{2}$
4	61	54 $\frac{1}{2}$	6 $\frac{1}{2}$	62	56 $\frac{1}{2}$	5 $\frac{1}{2}$
5	62 $\frac{1}{2}$	55 $\frac{1}{2}$	6 $\frac{1}{2}$	63 $\frac{1}{2}$	57 $\frac{1}{2}$	5 $\frac{1}{2}$
7	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6 $\frac{1}{2}$	62 $\frac{1}{2}$	57 $\frac{1}{2}$	5 $\frac{1}{2}$
8	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6 $\frac{1}{2}$	61 $\frac{1}{2}$	56 $\frac{1}{2}$	4 $\frac{1}{2}$
9	59 $\frac{1}{2}$	53 $\frac{1}{2}$	6	59 $\frac{1}{2}$	54 $\frac{1}{2}$	5
10	59 $\frac{1}{2}$	52 $\frac{1}{2}$	6	59 $\frac{1}{2}$	54 $\frac{1}{2}$	4 $\frac{1}{2}$
11	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6	59 $\frac{1}{2}$	55 $\frac{1}{2}$	4 $\frac{1}{2}$
12	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60 $\frac{1}{2}$	56 $\frac{1}{2}$	4
14	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60 $\frac{1}{2}$	56 $\frac{1}{2}$	3 $\frac{7}{8}$
15	63 $\frac{1}{2}$	57 $\frac{1}{2}$	6	62 $\frac{1}{2}$	58 $\frac{1}{2}$	3 $\frac{7}{8}$
16	62 $\frac{1}{2}$	56 $\frac{1}{2}$	6	61 $\frac{1}{2}$	57 $\frac{1}{2}$	4
17	59 $\frac{1}{2}$	52 $\frac{1}{2}$	6	—	—	—
18	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60 $\frac{1}{2}$	56 $\frac{1}{2}$	4
19	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6	60	56	4
21	59 $\frac{1}{2}$	52 $\frac{1}{2}$	6	59 $\frac{1}{2}$	55 $\frac{1}{2}$	4
22	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6	59 $\frac{1}{2}$	55 $\frac{1}{2}$	4
23	—	—	—	59 $\frac{1}{2}$	55 $\frac{1}{2}$	4
24	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6	59 $\frac{1}{2}$	55 $\frac{1}{2}$	4
28	60 $\frac{1}{2}$	54 $\frac{1}{2}$	6	58 $\frac{1}{2}$	54 $\frac{1}{2}$	4
29	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60 $\frac{1}{2}$	56 $\frac{1}{2}$	4
30	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60	56	4
31	61 $\frac{1}{2}$	55 $\frac{1}{2}$	6	60	56	4

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
January 1932						
4	60 <sup>3</sup> / <sub>4</sub>	54 <sup>3</sup> / <sub>4</sub>	6	59	56	3
5	61 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	6	59 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>
6	62 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	6	60 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
7	62 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>4</sub>	6	61 <sup>1</sup> / <sub>2</sub>	57	4 <sup>1</sup> / <sub>2</sub>
8	61	55 <sup>7</sup> / <sub>8</sub>	6	60	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
9	61	55 <sup>7</sup> / <sub>8</sub>	6	59	56 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
11	61 <sup>7</sup> / <sub>8</sub>	55 <sup>7</sup> / <sub>8</sub>	6	60	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
12	61	55 <sup>7</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	60	55 <sup>7</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
13	61	55 <sup>7</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	59	55 <sup>7</sup> / <sub>8</sub>	4
14	61 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	4
15	61	54	6 <sup>1</sup> / <sub>2</sub>	59	55 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
16	62	55 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	—	—	—
18	63	56 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	57	4 <sup>1</sup> / <sub>2</sub>
19	62	55 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	60	56	4 <sup>1</sup> / <sub>2</sub>
20	62 <sup>1</sup> / <sub>2</sub>	56	6 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
21	62 <sup>1</sup> / <sub>2</sub>	55 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	60	55 <sup>7</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
22	62	55 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	59	55 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
23	61	55	6 <sup>1</sup> / <sub>2</sub>	59	55	4 <sup>1</sup> / <sub>2</sub>
25	61	55 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	59	55 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
26	60	54	6 <sup>1</sup> / <sub>2</sub>	58	54	4 <sup>1</sup> / <sub>2</sub>
27	61	54 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	59	54 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>
28	61	54 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>
29	62 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	61	56	4 <sup>1</sup> / <sub>2</sub>
30	61 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	60	55 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
February 1	62	56 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>2</sub>	56	4 <sup>1</sup> / <sub>2</sub>
2	61 <sup>1</sup> / <sub>2</sub>	55 <sup>7</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>4</sub>	60	56	4 <sup>1</sup> / <sub>2</sub>
3	61 <sup>1</sup> / <sub>2</sub>	56	5 <sup>3</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
4	61 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	60	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
5	61	55 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	55 <sup>7</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
6	61 <sup>1</sup> / <sub>2</sub>	56	5 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	56	4 <sup>1</sup> / <sub>2</sub>
8	61 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	56	4 <sup>1</sup> / <sub>2</sub>
9	61 <sup>1</sup> / <sub>2</sub>	56	5 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	4
10	61 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	61	57	4
11	62 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4
12	62 <sup>1</sup> / <sub>2</sub>	57	5 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4
13	64 <sup>1</sup> / <sub>2</sub>	59	5 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	60	4
15	63 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	63	59	4
16	65	59 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub>
17	64	58	5 <sup>1</sup> / <sub>2</sub>	63	59	3 <sup>7</sup> / <sub>8</sub>
18	64 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub>
19	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	65	61 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub>
20	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	64 <sup>7</sup> / <sub>8</sub>	61	3 <sup>7</sup> / <sub>8</sub>
22	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	65	61	4
23	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
24	—	—	—	66	62	4
25	67 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	5	67 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	4
26	66 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	5	—	—	—
27	66 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	5	66	62	4
29	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
March 1	64 <sup>7</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	5	64 <sup>7</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	4
2	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
3	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
4	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
5	65 <sup>7</sup> / <sub>8</sub>	60 <sup>7</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	66	62	4
7	65	60 <sup>7</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
8	65 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	66	62	4
9	65 <sup>7</sup> / <sub>8</sub>	60 <sup>7</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	4
10	66 <sup>1</sup> / <sub>2</sub>	61	5 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	4
11	65 <sup>5</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	65 <sup>7</sup> / <sub>8</sub>	61 <sup>7</sup> / <sub>8</sub>	4
12	65 <sup>3</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	65 <sup>3</sup> / <sub>4</sub>	61 <sup>3</sup> / <sub>4</sub>	4
14	63	58 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	64	60	4
15	63 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	64	60	4
16	63	58 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	63 <sup>7</sup> / <sub>8</sub>	59 <sup>7</sup> / <sub>8</sub>	4
17	63	57 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	63 <sup>5</sup> / <sub>8</sub>	59 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
18	60 <sup>7</sup> / <sub>8</sub>	55 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	—	—	—
19	59	53 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>4</sub>	55 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
March 1932						
21	60 <sup>3</sup> / <sub>8</sub>	55 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>8</sub>	4
22	—	—	—	59 <sup>5</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
23	58 <sup>7</sup> / <sub>8</sub>	53 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	59 <sup>5</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
24	58 <sup>7</sup> / <sub>8</sub>	53 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	59 <sup>5</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
26	57 <sup>7</sup> / <sub>8</sub>	52 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	58 <sup>7</sup> / <sub>8</sub>	54 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
28	58 <sup>7</sup> / <sub>8</sub>	53 <sup>3</sup> / <sub>8</sub>	5	59 <sup>3</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
29	59	54 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
30	60	54 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	60	57 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
31	59 <sup>5</sup> / <sub>8</sub>	54 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>
April 1	58 <sup>7</sup> / <sub>8</sub>	53 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>8</sub>	56	3 <sup>7</sup> / <sub>8</sub>
2	60 <sup>3</sup> / <sub>8</sub>	56	4 <sup>3</sup> / <sub>8</sub>	62	58 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>
4	61 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>
5	60 <sup>3</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	61 <sup>5</sup> / <sub>8</sub>	58	3 <sup>3</sup> / <sub>4</sub>
6	60 <sup>5</sup> / <sub>8</sub>	55 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	61 <sup>7</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>
7	60 <sup>5</sup> / <sub>8</sub>	55 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	61	58 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>
8	58 <sup>7</sup> / <sub>8</sub>	54 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>
9	60	56 <sup>1</sup> / <sub>2</sub>	4	61 <sup>3</sup> / <sub>4</sub>	58 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>
11	62	58	4	63 <sup>5</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
12	63	59	4	64 <sup>5</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
13	62 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	4	63 <sup>3</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
14	63 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	4	65 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	4
15	62 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	4	64 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
16	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4	63 <sup>3</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>
18	61 <sup>5</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	4	63 <sup>3</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	4
19	62	58	4	64 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>
20	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4	63 <sup>3</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>
21	61 <sup>3</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>8</sub>	4	63 <sup>3</sup> / <sub>4</sub>	60	3 <sup>3</sup> / <sub>4</sub>
22	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4	62 <sup>7</sup> / <sub>8</sub>	59	3 <sup>3</sup> / <sub>4</sub>
23	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4	62 <sup>5</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>
25	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4	63 <sup>3</sup> / <sub>8</sub>	59	3 <sup>3</sup> / <sub>4</sub>
26	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4	62 <sup>7</sup> / <sub>8</sub>	59	3 <sup>3</sup> / <sub>4</sub>
27	60 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4	62 <sup>3</sup> / <sub>8</sub>	58	3 <sup>3</sup> / <sub>4</sub>
28	58	54	4	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>
29	58	54 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	60	56 <sup>3</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>
30	58 <sup>3</sup> / <sub>8</sub>	54 <sup>3</sup> / <sub>8</sub>	4	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>
May 2	59 <sup>3</sup> / <sub>8</sub>	55 <sup>1</sup> / <sub>8</sub>	4	61 <sup>1</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>
3	58 <sup>3</sup> / <sub>8</sub>	54 <sup>3</sup> / <sub>8</sub>	4	60 <sup>3</sup> / <sub>8</sub>	56	3 <sup>1</sup> / <sub>2</sub>
4	59 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	3	61 <sup>3</sup> / <sub>8</sub>	57	3 <sup>1</sup> / <sub>2</sub>
5	58 <sup>7</sup> / <sub>8</sub>	54 <sup>7</sup> / <sub>8</sub>	4	61 <sup>3</sup> / <sub>8</sub>	57	3 <sup>1</sup> / <sub>2</sub>
6	59 <sup>3</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	4	62 <sup>3</sup> / <sub>8</sub>	58	4
7	60	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>8</sub>	58	4
10	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	4
11	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>8</sub>	60	4 <sup>1</sup> / <sub>2</sub>
12	59 <sup>3</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	4
13	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>7</sup> / <sub>8</sub>	59	3 <sup>1</sup> / <sub>2</sub>
14	60 <sup>1</sup> / <sub>2</sub>	56 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>8</sub>	58 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>
16	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	63	59 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
17	61 <sup>1</sup> / <sub>2</sub>	58	3 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
18	60 <sup>3</sup> / <sub>8</sub>	56 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
19	60 <sup>3</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	—	—	—
20	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	60	3 <sup>1</sup> / <sub>2</sub>
21	61 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	64	60 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
23	62 <sup>1</sup> / <sub>2</sub>	59	3 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
25	62 <sup>1</sup> / <sub>2</sub>	58 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
26	61 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>
27	61 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>
28	61 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>
30	60	57 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>4</sub>	3
31	60 <sup>1</sup> / <sub>2</sub>	57	3 <sup>1</sup> / <sub>2</sub>	62	59	3
June 1	59	56 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	3
2	58	55	3 <sup>1</sup> / <sub>2</sub>	60 <sup>7</sup> / <sub>8</sub>	57 <sup>7</sup> / <sub>8</sub>	3
3 King's Birth-day-holiday						
4	54 <sup>1</sup> / <sub>2</sub>	51 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	56 <sup>1</sup> / <sub>4</sub>	53 <sup>3</sup> / <sub>4</sub>	3
6	53	50	3 <sup>1</sup> / <sub>4</sub>	56 <sup>5</sup> / <sub>8</sub>	52 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>
7	53	50 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	56	52 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>
8	52	49 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	54 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>8</sub>



COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
<b>June</b>						
1932						
9	52 $\frac{1}{4}$	49	3 $\frac{1}{4}$	54 $\frac{1}{4}$	51 $\frac{3}{4}$	3 $\frac{3}{4}$
10	53 $\frac{1}{4}$	50	3 $\frac{1}{4}$	55 $\frac{1}{2}$	52 $\frac{1}{4}$	3 $\frac{1}{4}$
11	53 $\frac{1}{4}$	50 $\frac{3}{4}$	3 $\frac{1}{4}$	55 $\frac{7}{8}$	52 $\frac{5}{8}$	3 $\frac{1}{8}$
13	52 $\frac{1}{4}$	49 $\frac{3}{4}$	3	55	51 $\frac{3}{4}$	3 $\frac{1}{4}$
14	51 $\frac{1}{2}$	48 $\frac{3}{4}$	3	53 $\frac{7}{8}$	50 $\frac{5}{8}$	3 $\frac{1}{8}$
15	52 $\frac{1}{2}$	49 $\frac{1}{2}$	3	55	51 $\frac{5}{8}$	3 $\frac{3}{8}$
16	52 $\frac{1}{4}$	49 $\frac{7}{8}$	3	55 $\frac{1}{4}$	52	3 $\frac{1}{4}$
17	51 $\frac{1}{2}$	48 $\frac{3}{4}$	3	54	50 $\frac{3}{4}$	3 $\frac{1}{4}$
18	51 $\frac{1}{2}$	48 $\frac{3}{4}$	3	53 $\frac{1}{2}$	50 $\frac{5}{8}$	3 $\frac{1}{8}$
20	51 $\frac{1}{2}$	49 $\frac{1}{2}$	3	54 $\frac{1}{2}$	51 $\frac{5}{8}$	3 $\frac{1}{8}$
21	51 $\frac{1}{2}$	48 $\frac{3}{4}$	3	54 $\frac{1}{2}$	51	3 $\frac{1}{8}$
22	52	49	3	54 $\frac{1}{2}$	51 $\frac{1}{2}$	3
23	51 $\frac{5}{8}$	48 $\frac{5}{8}$	3	53 $\frac{3}{4}$	50 $\frac{3}{4}$	3
24	51	48	3	53 $\frac{1}{2}$	50 $\frac{1}{2}$	3
25	51 $\frac{1}{4}$	48 $\frac{1}{4}$	3	54 $\frac{1}{4}$	51 $\frac{1}{4}$	3
27	51	48 $\frac{3}{4}$	3	53	50 $\frac{5}{8}$	3
28	51 $\frac{1}{2}$	48 $\frac{1}{2}$	3	53	50 $\frac{7}{8}$	3
29	51	48	3	53	50 $\frac{3}{4}$	3
30	50 $\frac{5}{8}$	47 $\frac{5}{8}$	3	53 $\frac{1}{2}$	50 $\frac{1}{2}$	3
<b>July</b>						
2	50	47 $\frac{3}{4}$	3	53 $\frac{3}{4}$	50 $\frac{3}{4}$	3
4	51 $\frac{1}{4}$	48 $\frac{3}{4}$	3	53 $\frac{3}{4}$	50 $\frac{5}{8}$	3
5	50 $\frac{3}{4}$	47 $\frac{1}{4}$	3 $\frac{1}{2}$	53 $\frac{1}{2}$	50 $\frac{1}{4}$	3
6	51 $\frac{1}{4}$	48 $\frac{1}{4}$	3 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{1}{4}$	3
7	51 $\frac{1}{4}$	47 $\frac{1}{4}$	3 $\frac{1}{2}$	53 $\frac{1}{4}$	50 $\frac{1}{2}$	3
8	51	48 $\frac{1}{4}$	3 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{1}{4}$	3
9	51	47 $\frac{3}{4}$	3 $\frac{1}{2}$	53	50 $\frac{3}{4}$	3
11	50 $\frac{1}{2}$	47	3 $\frac{1}{2}$	53	50	3
12	50 $\frac{1}{2}$	46 $\frac{5}{8}$	3 $\frac{1}{2}$	52 $\frac{5}{8}$	49 $\frac{5}{8}$	3
13	50 $\frac{1}{2}$	47	3 $\frac{1}{2}$	53	50	3
14	50 $\frac{1}{2}$	46 $\frac{7}{8}$	3 $\frac{1}{2}$	52 $\frac{7}{8}$	49 $\frac{7}{8}$	3
15	50 $\frac{1}{2}$	47 $\frac{3}{4}$	3 $\frac{1}{2}$	53	50 $\frac{3}{4}$	3
16	50 $\frac{3}{4}$	47 $\frac{1}{4}$	3 $\frac{1}{2}$	53 $\frac{1}{4}$	50 $\frac{1}{4}$	3
18	50 $\frac{3}{4}$	47 $\frac{1}{4}$	3 $\frac{1}{2}$	53 $\frac{1}{4}$	50 $\frac{1}{8}$	3 $\frac{1}{8}$
19	51 $\frac{1}{2}$	48 $\frac{1}{2}$	3	54 $\frac{1}{2}$	50 $\frac{3}{4}$	3 $\frac{1}{4}$
20	51 $\frac{1}{4}$	48 $\frac{7}{8}$	3	54 $\frac{1}{8}$	51 $\frac{3}{8}$	3 $\frac{1}{4}$
21	51 $\frac{1}{4}$	48 $\frac{3}{4}$	3	54	51	3
22	51 $\frac{1}{4}$	48 $\frac{7}{8}$	3	54 $\frac{1}{2}$	51	3
23	52 $\frac{1}{4}$	49 $\frac{3}{4}$	3	55 $\frac{3}{4}$	52 $\frac{3}{4}$	3
25	52 $\frac{1}{4}$	49	3	55 $\frac{1}{2}$	52 $\frac{1}{2}$	3 $\frac{1}{8}$
26	54 $\frac{1}{2}$	51 $\frac{1}{2}$	3	57 $\frac{1}{2}$	54 $\frac{1}{2}$	3 $\frac{1}{4}$
27	56 $\frac{1}{2}$	53 $\frac{1}{2}$	3	59 $\frac{1}{2}$	56 $\frac{1}{2}$	3 $\frac{1}{8}$
28	56 $\frac{1}{2}$	53	3	59 $\frac{1}{2}$	56	3 $\frac{1}{8}$
29	55 $\frac{1}{2}$	52 $\frac{1}{2}$	3 $\frac{1}{2}$	58 $\frac{1}{2}$	55 $\frac{1}{2}$	3 $\frac{1}{4}$
30	55	51 $\frac{1}{2}$	3 $\frac{1}{2}$	57 $\frac{1}{2}$	54 $\frac{1}{2}$	3 $\frac{1}{4}$
<b>August</b>						
2	53 $\frac{1}{2}$	50	3 $\frac{1}{2}$	55 $\frac{1}{2}$	52 $\frac{1}{2}$	3
3	54 $\frac{1}{2}$	51	3 $\frac{1}{2}$	56	53 $\frac{1}{2}$	2 $\frac{1}{2}$
4	54 $\frac{1}{2}$	51 $\frac{1}{2}$	3	56 $\frac{1}{2}$	53 $\frac{1}{4}$	2 $\frac{1}{2}$
5	55 $\frac{1}{2}$	52 $\frac{3}{8}$	3	57 $\frac{1}{2}$	54 $\frac{1}{4}$	2 $\frac{3}{4}$
6	57	54	3	59 $\frac{1}{2}$	56 $\frac{1}{2}$	2 $\frac{1}{2}$
8	57 $\frac{1}{2}$	54 $\frac{3}{4}$	3	59 $\frac{1}{2}$	57	2 $\frac{3}{4}$
9	56	53	3	58 $\frac{1}{2}$	55 $\frac{3}{4}$	2 $\frac{3}{4}$
10	57 $\frac{1}{2}$	54 $\frac{1}{2}$	3	59 $\frac{1}{2}$	56	2 $\frac{3}{4}$
11	53 $\frac{1}{2}$	53 $\frac{1}{2}$	3	58 $\frac{1}{2}$	55 $\frac{3}{4}$	2 $\frac{3}{4}$
12	55	52 $\frac{1}{2}$	2 $\frac{1}{2}$	57 $\frac{1}{2}$	54 $\frac{1}{2}$	2 $\frac{3}{4}$
13	54 $\frac{1}{2}$	52	2 $\frac{1}{2}$	56 $\frac{1}{2}$	54	2 $\frac{3}{4}$
15	55 $\frac{1}{2}$	53	2 $\frac{1}{2}$	58	55 $\frac{1}{2}$	2 $\frac{3}{4}$
16	54 $\frac{1}{2}$	52 $\frac{3}{4}$	2 $\frac{1}{2}$	57 $\frac{1}{2}$	54 $\frac{1}{2}$	3
17	54	51	2 $\frac{1}{2}$	56 $\frac{1}{2}$	53	3
18	54 $\frac{1}{2}$	51 $\frac{1}{2}$	2 $\frac{1}{2}$	56 $\frac{1}{2}$	53 $\frac{1}{4}$	3 $\frac{1}{8}$
19	52 $\frac{3}{4}$	49 $\frac{7}{8}$	2 $\frac{1}{2}$	55 $\frac{1}{8}$	52 $\frac{1}{4}$	3
20	56 $\frac{1}{2}$	48	2 $\frac{1}{2}$	54	50	3 $\frac{1}{8}$
22	51 $\frac{1}{4}$	48 $\frac{1}{4}$	2 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{1}{4}$	3
23	52 $\frac{3}{4}$	50	2	54 $\frac{3}{4}$	51 $\frac{3}{4}$	2 $\frac{3}{4}$
24	51 $\frac{1}{2}$	49 $\frac{3}{4}$	2	53 $\frac{3}{4}$	50	2 $\frac{3}{4}$
25	52 $\frac{1}{2}$	50 $\frac{1}{2}$	2	54 $\frac{1}{2}$	51 $\frac{1}{2}$	2 $\frac{3}{4}$
26	51 $\frac{1}{2}$	49 $\frac{1}{2}$	2	53 $\frac{5}{8}$	50	2 $\frac{3}{8}$
27	52	50	2	54 $\frac{1}{8}$	51	2 $\frac{3}{8}$
29	54 $\frac{1}{4}$	52 $\frac{1}{4}$	2	56 $\frac{1}{4}$	53	2 $\frac{3}{4}$
30	53 $\frac{1}{2}$	51 $\frac{1}{2}$	2	55 $\frac{1}{2}$	53	2 $\frac{3}{4}$
31	52 $\frac{3}{8}$	50	2	54 $\frac{3}{4}$	52	2 $\frac{3}{4}$

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
September 1932						
1	52 $\frac{1}{4}$	50 $\frac{1}{4}$	1 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{3}{4}$	2 $\frac{1}{4}$
2	53	51 $\frac{1}{4}$	1 $\frac{1}{2}$	54 $\frac{1}{4}$	52	2 $\frac{1}{4}$
3	53	52 $\frac{1}{4}$	1 $\frac{1}{2}$	55 $\frac{1}{4}$	53 $\frac{1}{4}$	2 $\frac{1}{4}$
6	53	52	1 $\frac{1}{2}$	55	53 $\frac{1}{4}$	2 $\frac{1}{4}$
7	52	51	1 $\frac{1}{2}$	54 $\frac{1}{4}$	52	2 $\frac{1}{4}$
8	51	50 $\frac{1}{4}$	1 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{5}{8}$	2 $\frac{1}{4}$
9	52	50 $\frac{1}{2}$	1 $\frac{1}{2}$	54 $\frac{1}{4}$	51 $\frac{1}{2}$	2 $\frac{1}{4}$
10	51 $\frac{1}{4}$	49 $\frac{7}{8}$	1 $\frac{1}{2}$	53	51	2 $\frac{1}{4}$
12	49	48 $\frac{1}{4}$	1 $\frac{1}{2}$	52	49 $\frac{1}{4}$	2 $\frac{1}{4}$
13	49	48	1 $\frac{1}{2}$	51 $\frac{3}{4}$	48 $\frac{7}{8}$	2 $\frac{1}{4}$
14	48	46 $\frac{1}{4}$	1 $\frac{1}{2}$	50	47 $\frac{5}{8}$	2 $\frac{1}{4}$
15	49	47 $\frac{1}{4}$	1 $\frac{1}{2}$	51 $\frac{3}{4}$	49	2 $\frac{1}{4}$
16	48	46 $\frac{1}{4}$	1 $\frac{1}{2}$	50	48	2 $\frac{1}{4}$
17	48	46 $\frac{1}{4}$	1 $\frac{1}{2}$	50 $\frac{1}{2}$	48 $\frac{1}{4}$	2 $\frac{1}{4}$
19	47	46 $\frac{1}{4}$	1 $\frac{1}{2}$	50 $\frac{1}{2}$	48 $\frac{1}{4}$	2
20	48	47 $\frac{1}{4}$	1	50	48	2
21	49	48 $\frac{1}{4}$	1	51 $\frac{1}{4}$	49 $\frac{1}{4}$	2
22	48	48	1	50 $\frac{1}{4}$	49	1 $\frac{1}{4}$
23	48	47 $\frac{3}{8}$	1 $\frac{1}{4}$	50 $\frac{1}{4}$	48 $\frac{1}{4}$	2
24	48	47 $\frac{5}{8}$	1 $\frac{1}{4}$	50	48 $\frac{1}{2}$	2 $\frac{1}{4}$
26	48	47 $\frac{1}{2}$	1 $\frac{1}{2}$	50 $\frac{1}{2}$	48 $\frac{1}{4}$	2 $\frac{1}{4}$
27	47	47	1	50	47 $\frac{3}{4}$	2 $\frac{1}{4}$
28	47	47 $\frac{1}{8}$	1	50 $\frac{1}{4}$	48	2 $\frac{1}{4}$
29	47	46 $\frac{1}{4}$	1	49 $\frac{1}{4}$	47	2 $\frac{1}{4}$
30	47	46 $\frac{1}{4}$	1	49 $\frac{1}{4}$	47 $\frac{1}{4}$	2 $\frac{1}{4}$
October 1	47	46 $\frac{1}{4}$	1	49 $\frac{1}{4}$	47 $\frac{1}{4}$	2 $\frac{1}{4}$
3	47	46 $\frac{1}{4}$	1	49 $\frac{1}{4}$	47 $\frac{1}{4}$	2 $\frac{1}{4}$
4	47	46 $\frac{1}{4}$	1	49 $\frac{1}{4}$	47 $\frac{1}{4}$	2 $\frac{1}{4}$
5	46	45 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46 $\frac{5}{8}$	2 $\frac{1}{4}$
6	46 $\frac{1}{4}$	45 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46	2 $\frac{1}{4}$
7	46	45	1	48 $\frac{1}{4}$	46	2 $\frac{1}{4}$
8	45 $\frac{1}{4}$	44 $\frac{3}{4}$	1	48 $\frac{1}{4}$	45 $\frac{7}{8}$	2 $\frac{1}{4}$
11	45	44 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46	2
12	46	45 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46 $\frac{3}{8}$	1 $\frac{7}{8}$
13	46	45 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46	2 $\frac{1}{8}$
14	46 $\frac{1}{4}$	45 $\frac{1}{4}$	1	48 $\frac{1}{4}$	46 $\frac{1}{4}$	2
15	45	45	1	48 $\frac{1}{4}$	46	2
17	45	45	1	48 $\frac{1}{4}$	46 $\frac{1}{4}$	2
18	45	45	1	48 $\frac{1}{4}$	46 $\frac{3}{8}$	1 $\frac{7}{8}$
19	45	45	1	48 $\frac{1}{4}$	46	1 $\frac{5}{8}$
20	45	45	1	48 $\frac{1}{4}$	47	1 $\frac{3}{4}$
21	46	45	1	49	47 $\frac{3}{8}$	1 $\frac{1}{4}$
22	46	45	1	49 $\frac{1}{4}$	48	1 $\frac{1}{4}$
24	46	45	1	49 $\frac{1}{4}$	47 $\frac{7}{8}$	1 $\frac{1}{4}$
25	44 $\frac{1}{2}$	43 $\frac{1}{4}$	1 $\frac{1}{4}$	47	45 $\frac{1}{2}$	1 $\frac{1}{4}$
26	43 $\frac{1}{4}$	41 $\frac{1}{4}$	1 $\frac{1}{2}$	45 $\frac{1}{4}$	44	1 $\frac{1}{4}$
27	45	43 $\frac{1}{4}$	1 $\frac{1}{2}$	47 $\frac{1}{4}$	46 $\frac{3}{8}$	1 $\frac{1}{4}$
28	45 $\frac{1}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{2}$	48	46 $\frac{1}{2}$	1 $\frac{1}{2}$
29	44	42 $\frac{1}{4}$	1 $\frac{1}{2}$	46 $\frac{1}{4}$	44 $\frac{1}{2}$	1 $\frac{1}{2}$
31	44	43 $\frac{3}{8}$	1 $\frac{1}{4}$	46 $\frac{1}{4}$	45	1 $\frac{1}{4}$
November 1	43	42 $\frac{1}{4}$	1 $\frac{1}{2}$	45 $\frac{1}{4}$	44	1 $\frac{1}{4}$
2	44 $\frac{1}{4}$	42 $\frac{5}{8}$	1 $\frac{1}{2}$	46 $\frac{1}{4}$	44 $\frac{7}{8}$	1 $\frac{1}{8}$
3	44	42 $\frac{3}{4}$	1 $\frac{1}{2}$	45 $\frac{1}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$
4	44	43 $\frac{1}{8}$	1 $\frac{1}{2}$	45 $\frac{1}{4}$	44 $\frac{5}{8}$	1 $\frac{1}{8}$
5	45 $\frac{1}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{4}$	44	1 $\frac{1}{4}$
7	47	46 $\frac{1}{4}$	1	48	46 $\frac{3}{4}$	1 $\frac{1}{4}$
8	46	45 $\frac{3}{4}$	1	47 $\frac{1}{4}$	46	1 $\frac{1}{4}$
9	45 $\frac{1}{4}$	44 $\frac{3}{4}$	1	46	45 $\frac{1}{2}$	1 $\frac{1}{4}$
10	45	44 $\frac{1}{2}$	1 $\frac{1}{2}$	46 $\frac{1}{4}$	45 $\frac{5}{8}$	1 $\frac{1}{4}$
12	47	46	1	48	46	1 $\frac{1}{4}$
14	46 $\frac{1}{4}$	45 $\frac{5}{8}$	1 $\frac{1}{4}$	47 $\frac{1}{4}$	46	1 $\frac{1}{4}$
15	46 $\frac{1}{4}$	45 $\frac{1}{4}$	1 $\frac{1}{4}$	47 $\frac{1}{4}$	46 $\frac{5}{8}$	1 $\frac{1}{8}$
16	46	45 $\frac{3}{8}$	1 $\frac{1}{4}$	47 $\frac{1}{4}$	46 $\frac{1}{8}$	1 $\frac{3}{8}$
17	45 $\frac{1}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	46	45 $\frac{1}{4}$	1 $\frac{1}{4}$
18	45 $\frac{1}{4}$	44 $\frac{5}{8}$	1 $\frac{1}{4}$	46 $\frac{1}{4}$	45 $\frac{1}{2}$	1 $\frac{1}{4}$
19	47 $\frac{1}{4}$	46	1 $\frac{1}{4}$	47 $\frac{1}{4}$	46 $\frac{1}{4}$	1 $\frac{1}{4}$
21	47	45 $\frac{3}{4}$	1 $\frac{1}{4}$	47 $\frac{1}{4}$	45 $\frac{3}{4}$	1 $\frac{1}{4}$
22	48 $\frac{1}{4}$	47 $\frac{1}{4}$	1	47 $\frac{1}{4}$	46 $\frac{1}{2}$	1 $\frac{1}{4}$

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
1932						
November 23	47 $\frac{1}{8}$	46 $\frac{1}{8}$	1	46 $\frac{1}{8}$	44 $\frac{7}{8}$	1 $\frac{5}{8}$
24	47	46	1	46 $\frac{3}{8}$	45	1 $\frac{3}{8}$
25	46 $\frac{7}{8}$	45 $\frac{7}{8}$	1	46 $\frac{1}{2}$	44 $\frac{7}{8}$	1 $\frac{1}{8}$
26	47	46	1	46 $\frac{5}{8}$	45	1 $\frac{5}{8}$
28	46 $\frac{3}{4}$	45 $\frac{3}{4}$	1	46 $\frac{3}{8}$	44 $\frac{3}{4}$	1 $\frac{5}{8}$
29	46 $\frac{1}{2}$	45 $\frac{1}{2}$	1	46	43 $\frac{1}{2}$	2 $\frac{1}{2}$
30	46	44 $\frac{3}{4}$	1 $\frac{1}{4}$	44 $\frac{3}{4}$	43 $\frac{1}{4}$	1 $\frac{1}{4}$
December 1	47	45 $\frac{1}{2}$	1 $\frac{1}{2}$	45 $\frac{1}{2}$	44	1 $\frac{1}{2}$
2	46 $\frac{1}{2}$	45	1 $\frac{1}{2}$	45	43 $\frac{1}{2}$	1 $\frac{1}{2}$
3	45 $\frac{7}{8}$	44 $\frac{3}{8}$	1 $\frac{1}{2}$	44 $\frac{1}{4}$	42 $\frac{5}{8}$	1 $\frac{1}{8}$
5	46 $\frac{1}{4}$	44 $\frac{3}{4}$	1 $\frac{1}{4}$	44 $\frac{3}{4}$	42 $\frac{3}{4}$	2
6	45 $\frac{1}{8}$	43 $\frac{3}{8}$	1 $\frac{1}{4}$	44 $\frac{1}{2}$	42 $\frac{1}{4}$	2
7	45 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
8	45 $\frac{1}{8}$	43 $\frac{3}{8}$	1 $\frac{1}{4}$	44 $\frac{1}{4}$	41 $\frac{3}{4}$	2 $\frac{1}{4}$
9	45	43	2	44	41 $\frac{1}{2}$	2 $\frac{1}{2}$
10	45 $\frac{1}{2}$	43 $\frac{1}{2}$	2	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
12	45	43	2	44 $\frac{1}{8}$	41 $\frac{5}{8}$	2 $\frac{1}{8}$
13	43 $\frac{1}{2}$	41 $\frac{1}{2}$	2	42 $\frac{3}{4}$	40 $\frac{1}{4}$	2 $\frac{1}{4}$
14	43	41	2	42 $\frac{1}{2}$	39 $\frac{1}{4}$	2 $\frac{1}{4}$
15	42 $\frac{3}{4}$	41	1 $\frac{3}{4}$	41 $\frac{3}{4}$	39	2 $\frac{3}{4}$
16	40 $\frac{5}{8}$	38 $\frac{7}{8}$	1 $\frac{1}{8}$	39 $\frac{3}{8}$	36 $\frac{3}{4}$	2 $\frac{3}{4}$
17	42	40 $\frac{1}{2}$	1 $\frac{1}{2}$	40 $\frac{1}{2}$	37 $\frac{7}{8}$	2 $\frac{1}{8}$
19	41 $\frac{1}{2}$	39 $\frac{3}{4}$	1 $\frac{1}{4}$	40 $\frac{1}{4}$	37 $\frac{1}{2}$	2 $\frac{1}{4}$
20	40 $\frac{7}{8}$	39 $\frac{1}{8}$	1 $\frac{1}{8}$	39 $\frac{1}{8}$	37 $\frac{1}{8}$	2 $\frac{1}{8}$
21	41	39 $\frac{3}{8}$	1 $\frac{1}{8}$	40 $\frac{1}{8}$	37 $\frac{3}{8}$	2 $\frac{1}{8}$
22	40 $\frac{3}{4}$	39	1 $\frac{3}{4}$	40 $\frac{3}{4}$	37 $\frac{3}{4}$	2 $\frac{3}{4}$
23	41	39 $\frac{5}{8}$	1 $\frac{3}{8}$	41 $\frac{1}{8}$	38 $\frac{1}{2}$	2 $\frac{1}{2}$
24	41	40	1	42	39 $\frac{1}{4}$	2 $\frac{1}{4}$
27	40 $\frac{1}{4}$	38 $\frac{1}{2}$	1 $\frac{1}{2}$	40 $\frac{1}{2}$	37 $\frac{1}{4}$	2 $\frac{1}{4}$
28	40 $\frac{1}{2}$	38 $\frac{1}{2}$	1 $\frac{1}{2}$	40	38	2
29	41 $\frac{1}{4}$	39 $\frac{1}{4}$	1 $\frac{1}{4}$	41 $\frac{1}{4}$	39	2 $\frac{1}{4}$
30	42 $\frac{1}{4}$	40 $\frac{1}{4}$	1 $\frac{1}{4}$	41 $\frac{1}{4}$	39 $\frac{1}{4}$	2 $\frac{1}{4}$
31	42 $\frac{1}{8}$	40 $\frac{1}{8}$	1 $\frac{3}{8}$	41	38 $\frac{7}{8}$	2 $\frac{1}{8}$
1933						
January 3	42 $\frac{1}{2}$	40 $\frac{1}{2}$	1 $\frac{1}{2}$	42	39 $\frac{1}{2}$	2 $\frac{1}{2}$
4	44 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$	41 $\frac{1}{2}$	41 $\frac{1}{2}$	2 $\frac{1}{2}$
5	45	43 $\frac{1}{2}$	1 $\frac{1}{2}$	44 $\frac{1}{4}$	41 $\frac{3}{4}$	2 $\frac{1}{4}$
6	46 $\frac{1}{2}$	44 $\frac{1}{2}$	1 $\frac{1}{2}$	45 $\frac{1}{2}$	42 $\frac{1}{2}$	2 $\frac{1}{2}$
7	46 $\frac{1}{2}$	45	1 $\frac{1}{2}$	45 $\frac{1}{2}$	43 $\frac{1}{2}$	2 $\frac{1}{2}$
9	45 $\frac{5}{8}$	44 $\frac{1}{8}$	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
10	47	45 $\frac{1}{2}$	1 $\frac{1}{2}$	46	43 $\frac{1}{2}$	2 $\frac{1}{2}$
11	46 $\frac{1}{2}$	45	1 $\frac{1}{2}$	45 $\frac{1}{2}$	43	2 $\frac{1}{2}$
12	45 $\frac{3}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	44 $\frac{1}{4}$	42 $\frac{1}{4}$	2 $\frac{1}{4}$
13	45 $\frac{1}{2}$	44 $\frac{1}{2}$	1 $\frac{1}{2}$	43 $\frac{1}{2}$	41 $\frac{1}{4}$	2 $\frac{1}{4}$
14	45	43 $\frac{1}{2}$	1 $\frac{1}{2}$	43 $\frac{1}{2}$	41 $\frac{1}{2}$	2 $\frac{1}{2}$
16	44 $\frac{3}{8}$	42 $\frac{1}{8}$	1 $\frac{1}{4}$	42 $\frac{5}{8}$	40 $\frac{1}{2}$	2 $\frac{1}{2}$
17	44 $\frac{7}{8}$	43 $\frac{3}{8}$	1 $\frac{1}{4}$	43 $\frac{1}{8}$	41 $\frac{1}{8}$	2 $\frac{1}{8}$
18	44 $\frac{7}{8}$	43 $\frac{3}{8}$	1 $\frac{1}{4}$	43 $\frac{1}{8}$	41 $\frac{1}{8}$	2 $\frac{1}{8}$
19	46 $\frac{1}{8}$	44 $\frac{5}{8}$	1 $\frac{1}{4}$	44 $\frac{3}{8}$	42 $\frac{1}{8}$	2 $\frac{1}{8}$
20	45 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$	43 $\frac{1}{2}$	41 $\frac{1}{2}$	2 $\frac{1}{2}$
21	44 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$	43 $\frac{1}{2}$	43 $\frac{1}{2}$	2 $\frac{1}{2}$
23	45 $\frac{3}{8}$	43 $\frac{1}{8}$	1 $\frac{1}{4}$	43 $\frac{7}{8}$	41 $\frac{1}{8}$	2 $\frac{1}{8}$
24	45 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
25	45 $\frac{3}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	44 $\frac{3}{4}$	42 $\frac{1}{4}$	2 $\frac{1}{4}$
26	45 $\frac{1}{4}$	43 $\frac{1}{4}$	1 $\frac{1}{4}$	44 $\frac{1}{4}$	43	2 $\frac{1}{4}$
27	45 $\frac{1}{4}$	43 $\frac{1}{4}$	1 $\frac{1}{4}$	44 $\frac{3}{4}$	42	2 $\frac{1}{4}$
28	44 $\frac{7}{8}$	43 $\frac{3}{8}$	1 $\frac{1}{4}$	44 $\frac{3}{8}$	42	2 $\frac{1}{8}$
30	45 $\frac{1}{8}$	43 $\frac{7}{8}$	1 $\frac{1}{8}$	44 $\frac{5}{8}$	44	2 $\frac{1}{8}$
31	45 $\frac{1}{4}$	44	1 $\frac{1}{4}$	44 $\frac{1}{4}$	42	2 $\frac{1}{4}$
February 1	45 $\frac{1}{2}$	44	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
2	45 $\frac{1}{2}$	44 $\frac{1}{2}$	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
3	45 $\frac{3}{8}$	44 $\frac{1}{8}$	1 $\frac{1}{4}$	44 $\frac{7}{8}$	42	2 $\frac{1}{8}$
4	45	43 $\frac{1}{2}$	1 $\frac{1}{2}$	44 $\frac{1}{2}$	42	2 $\frac{1}{2}$
6	45 $\frac{3}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	45 $\frac{3}{4}$	43 $\frac{1}{4}$	2 $\frac{1}{4}$
7	45 $\frac{3}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	45 $\frac{1}{8}$	43 $\frac{1}{8}$	2 $\frac{1}{8}$
8	46 $\frac{1}{2}$	45 $\frac{1}{2}$	1 $\frac{1}{2}$	45 $\frac{7}{8}$	44	1 $\frac{1}{8}$
9	45 $\frac{3}{4}$	44 $\frac{1}{4}$	1 $\frac{1}{4}$	45 $\frac{3}{4}$	43 $\frac{1}{4}$	2 $\frac{1}{4}$
10	45 $\frac{5}{8}$	44 $\frac{1}{8}$	1 $\frac{1}{4}$	45 $\frac{1}{4}$	43	2 $\frac{1}{4}$



COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date		Closing Price			Closing Price		
		Vancouver			Winnipeg		
		1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
				cents			cents
February	11 1933	46 $\frac{1}{2}$	45 $\frac{1}{2}$	1 $\frac{1}{2}$	46	44 $\frac{1}{2}$	1 $\frac{1}{2}$
	13	46 $\frac{1}{2}$	45 $\frac{3}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{2}$
	14	45 $\frac{1}{2}$	44 $\frac{1}{2}$	1 $\frac{1}{4}$	45 $\frac{1}{2}$	43 $\frac{1}{2}$	1 $\frac{1}{2}$
	15	46 $\frac{1}{2}$	44 $\frac{7}{8}$	1 $\frac{1}{2}$	45 $\frac{1}{2}$	44	1 $\frac{1}{2}$
	16	46 $\frac{1}{2}$	45 $\frac{1}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{2}$	44 $\frac{5}{8}$	1 $\frac{1}{2}$
	17	46 $\frac{1}{2}$	45 $\frac{1}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{2}$	44 $\frac{5}{8}$	1 $\frac{1}{2}$
	18	46 $\frac{1}{2}$	45	1 $\frac{1}{2}$	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{2}$
	20	46	44 $\frac{3}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{2}$
	21	46 $\frac{1}{2}$	45 $\frac{5}{8}$	1 $\frac{1}{2}$	47	45 $\frac{1}{2}$	1 $\frac{1}{2}$
	22	46 $\frac{1}{2}$	45 $\frac{5}{8}$	1 $\frac{1}{2}$	47	45 $\frac{1}{2}$	1 $\frac{1}{2}$
	23	46 $\frac{1}{2}$	44 $\frac{5}{8}$	1 $\frac{1}{2}$	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{2}$
	24	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{4}$	46 $\frac{1}{2}$	44 $\frac{1}{2}$	1 $\frac{1}{2}$
	25	45 $\frac{1}{2}$	44	1 $\frac{1}{2}$	45 $\frac{1}{2}$	43 $\frac{3}{4}$	1 $\frac{1}{2}$
	27	45 $\frac{1}{2}$	44	1 $\frac{1}{2}$	45 $\frac{1}{2}$	43 $\frac{3}{4}$	1 $\frac{1}{2}$
	28	46 $\frac{1}{2}$	44 $\frac{3}{4}$	2	46 $\frac{1}{2}$	44 $\frac{1}{4}$	1 $\frac{1}{2}$
March	1	46 $\frac{1}{2}$	44 $\frac{3}{4}$	2	46 $\frac{1}{2}$	44 $\frac{3}{4}$	1 $\frac{1}{2}$
	2	46 $\frac{1}{2}$	44 $\frac{1}{4}$	2	46	44 $\frac{1}{2}$	2 $\frac{1}{4}$
	3	47	45	2	46 $\frac{3}{4}$	45	1 $\frac{3}{4}$
	4	48 $\frac{1}{2}$	46 $\frac{3}{4}$	2	48 $\frac{1}{2}$	46 $\frac{3}{4}$	1 $\frac{1}{2}$
	6	50 $\frac{1}{2}$	48 $\frac{3}{4}$	2	50 $\frac{1}{2}$	48 $\frac{3}{4}$	1 $\frac{1}{2}$
	7	49 $\frac{1}{2}$	47 $\frac{7}{8}$	2	49 $\frac{3}{4}$	47 $\frac{7}{8}$	1 $\frac{1}{2}$
	8	48 $\frac{1}{2}$	46 $\frac{7}{8}$	2	48 $\frac{1}{2}$	46 $\frac{7}{8}$	1 $\frac{1}{2}$
	9	49 $\frac{1}{2}$	47 $\frac{7}{8}$	2	49 $\frac{1}{2}$	48	1 $\frac{1}{2}$
	10	50 $\frac{1}{2}$	48 $\frac{3}{4}$	2	50 $\frac{1}{2}$	48 $\frac{7}{8}$	1 $\frac{1}{2}$
	11	50 $\frac{1}{2}$	48 $\frac{3}{4}$	2	50 $\frac{1}{2}$	49	1 $\frac{1}{2}$
	13	49 $\frac{1}{2}$	47 $\frac{3}{4}$	2	49 $\frac{1}{2}$	48	1 $\frac{1}{2}$
	14	49 $\frac{1}{2}$	47	2 $\frac{1}{8}$	49 $\frac{1}{2}$	47 $\frac{3}{4}$	1 $\frac{1}{2}$
	15	50 $\frac{1}{2}$	48 $\frac{1}{2}$	2 $\frac{1}{8}$	50 $\frac{1}{2}$	49	1 $\frac{1}{2}$
	16	53	50 $\frac{1}{2}$	2 $\frac{1}{2}$	53 $\frac{1}{2}$	51 $\frac{1}{4}$	1 $\frac{1}{2}$
	17	50 $\frac{1}{2}$	48 $\frac{1}{2}$	2 $\frac{1}{8}$	50 $\frac{3}{4}$	48 $\frac{1}{2}$	1 $\frac{1}{2}$
	18	49 $\frac{1}{2}$	47 $\frac{1}{4}$	2 $\frac{1}{8}$	49 $\frac{1}{2}$	48	1 $\frac{1}{2}$
	20	49 $\frac{1}{2}$	47 $\frac{3}{4}$	2 $\frac{1}{8}$	49 $\frac{1}{2}$	47 $\frac{3}{4}$	1 $\frac{1}{2}$
	21	48 $\frac{1}{2}$	46 $\frac{1}{2}$	2 $\frac{1}{8}$	48 $\frac{1}{2}$	46 $\frac{1}{2}$	1 $\frac{1}{2}$
	22	47 $\frac{1}{2}$	45 $\frac{1}{2}$	2 $\frac{1}{4}$	47 $\frac{1}{2}$	45 $\frac{3}{4}$	1 $\frac{1}{2}$
	23	48 $\frac{1}{2}$	46 $\frac{1}{2}$	2 $\frac{1}{4}$	48 $\frac{1}{2}$	46 $\frac{1}{2}$	1 $\frac{1}{2}$
	24	48 $\frac{1}{2}$	46 $\frac{1}{2}$	2 $\frac{1}{4}$	48 $\frac{1}{2}$	46 $\frac{1}{2}$	1 $\frac{1}{2}$
	25	48 $\frac{1}{2}$	46 $\frac{1}{2}$	2 $\frac{1}{4}$	48 $\frac{1}{2}$	47 $\frac{1}{2}$	1 $\frac{1}{2}$
	27	48 $\frac{1}{2}$	45 $\frac{7}{8}$	2 $\frac{1}{4}$	48 $\frac{1}{2}$	46 $\frac{1}{2}$	1 $\frac{1}{2}$
	28	49 $\frac{1}{2}$	46 $\frac{7}{8}$	2 $\frac{1}{4}$	49 $\frac{1}{2}$	47 $\frac{1}{2}$	1 $\frac{1}{2}$
	29	48 $\frac{1}{2}$	46 $\frac{1}{2}$	2	48 $\frac{1}{2}$	47	1 $\frac{1}{2}$
	30	48 $\frac{1}{2}$	45 $\frac{3}{4}$	2 $\frac{3}{4}$	48 $\frac{1}{2}$	46 $\frac{3}{4}$	1 $\frac{1}{2}$
	31	48 $\frac{1}{2}$	46	2 $\frac{3}{4}$	49	47 $\frac{1}{2}$	1 $\frac{1}{2}$
April	1	49	46 $\frac{5}{8}$	2 $\frac{3}{4}$	49 $\frac{3}{4}$	47 $\frac{5}{8}$	1 $\frac{1}{2}$
	3	49 $\frac{1}{2}$	46 $\frac{7}{8}$	2 $\frac{3}{4}$	49 $\frac{1}{2}$	48	1 $\frac{1}{2}$
	4	49 $\frac{1}{2}$	46 $\frac{5}{8}$	2 $\frac{3}{4}$	50	48 $\frac{1}{4}$	1 $\frac{1}{2}$
	5	50	47 $\frac{5}{8}$	2 $\frac{3}{4}$	51	49 $\frac{1}{4}$	1 $\frac{1}{2}$
	6	50 $\frac{1}{2}$	47 $\frac{5}{8}$	2 $\frac{3}{4}$	51 $\frac{1}{4}$	49 $\frac{1}{4}$	1 $\frac{1}{2}$
	7	49 $\frac{1}{2}$	47 $\frac{3}{4}$	2 $\frac{3}{4}$	50 $\frac{1}{2}$	49	1 $\frac{1}{2}$
	8	49 $\frac{1}{2}$	47 $\frac{1}{4}$	2 $\frac{3}{4}$	50 $\frac{3}{4}$	48 $\frac{7}{8}$	1 $\frac{1}{2}$
	10	49 $\frac{1}{2}$	47 $\frac{1}{4}$	2 $\frac{3}{4}$	50 $\frac{3}{4}$	48	1 $\frac{1}{2}$
	11	51 $\frac{1}{2}$	48 $\frac{1}{2}$	2 $\frac{3}{4}$	52 $\frac{1}{2}$	50 $\frac{1}{2}$	1 $\frac{1}{2}$
	12	50 $\frac{1}{2}$	48 $\frac{1}{2}$	2 $\frac{3}{4}$	51 $\frac{1}{2}$	49 $\frac{7}{8}$	1 $\frac{1}{2}$
	13	51	49	2	52 $\frac{1}{4}$	50 $\frac{3}{8}$	1 $\frac{1}{2}$
	14	Good Friday.			52 $\frac{1}{2}$	50 $\frac{5}{8}$	1 $\frac{1}{2}$
	15	51 $\frac{1}{2}$	48 $\frac{7}{8}$	2 $\frac{3}{4}$	52 $\frac{1}{2}$	50 $\frac{1}{4}$	1 $\frac{1}{2}$
	17	50 $\frac{1}{2}$	48	2 $\frac{3}{4}$	52 $\frac{1}{2}$	50 $\frac{1}{4}$	1 $\frac{1}{2}$
	18	51 $\frac{1}{2}$	49	2 $\frac{3}{4}$	52 $\frac{1}{2}$	50 $\frac{1}{4}$	1 $\frac{1}{2}$
	19	52 $\frac{1}{2}$	50 $\frac{1}{4}$	2 $\frac{3}{4}$	54	52 $\frac{1}{4}$	1 $\frac{1}{2}$
	20	53 $\frac{1}{2}$	51 $\frac{1}{4}$	2 $\frac{3}{4}$	55 $\frac{1}{4}$	53 $\frac{5}{8}$	1 $\frac{1}{2}$
	21	53 $\frac{1}{2}$	50	2 $\frac{3}{4}$	54 $\frac{1}{2}$	53	1 $\frac{1}{2}$
	22	56	54 $\frac{1}{2}$	2 $\frac{3}{4}$	58 $\frac{1}{2}$	56 $\frac{7}{8}$	1 $\frac{1}{2}$
	24	59 $\frac{1}{2}$	55 $\frac{1}{2}$	2 $\frac{3}{4}$	59	58 $\frac{1}{8}$	1 $\frac{1}{2}$
	25	56 $\frac{1}{2}$	53 $\frac{1}{4}$	2 $\frac{3}{4}$	57 $\frac{1}{8}$	56 $\frac{1}{8}$	1 $\frac{1}{2}$

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date		Closing Price			Closing Price		
		Vancouver			Winnipeg		
		1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
1933				cents			cents
April	26	56 <sup>5</sup> / <sub>8</sub>	54 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	56 <sup>1</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	27	55 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	56 <sup>5</sup> / <sub>8</sub>	55 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	28	54 <sup>1</sup> / <sub>2</sub>	52 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>8</sub>	54 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	29	58	55 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	59	57 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
May	1	58	55 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	57 <sup>5</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	2	59 <sup>7</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>	2 <sup>2</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>8</sub>	59 <sup>5</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	3	60	59 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	62	60 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	4	61	59 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	63	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	5	64	61 <sup>1</sup> / <sub>2</sub>	2 <sup>5</sup> / <sub>8</sub>	65 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	6	63	60 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	8	Holiday—Arbor Day					
	9	60 <sup>5</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	61 <sup>7</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
June	10	60	59	1 <sup>2</sup> / <sub>8</sub>	62	60 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	11	63	61 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	64	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	12	63 <sup>5</sup> / <sub>8</sub>	61 <sup>7</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	65 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	13	63	61 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	65	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	15	62 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	16	62 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	17	62 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	63	1 <sup>2</sup> / <sub>8</sub>
	18	61 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	61 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	19	60	58 <sup>7</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	62 <sup>3</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	20	59	58 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	22	58 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>	60	59 <sup>2</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	23	60	58 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	62 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	25	59 <sup>7</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	1 <sup>4</sup> / <sub>8</sub>	62 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	26	60	58 <sup>3</sup> / <sub>8</sub>	2	62 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	27	62 <sup>7</sup> / <sub>8</sub>	60 <sup>7</sup> / <sub>8</sub>	2	65	63 <sup>7</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	29	62	60 <sup>1</sup> / <sub>2</sub>	2	64 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	30	63 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	2	65 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	31	62 <sup>3</sup> / <sub>4</sub>	61	1 <sup>3</sup> / <sub>8</sub>	64 <sup>7</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	1	62	60 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	64	63	1 <sup>2</sup> / <sub>8</sub>
	2	61 <sup>3</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>8</sub>	62 <sup>3</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	5	61 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	63	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	6	60	59 <sup>3</sup> / <sub>8</sub>	1 <sup>4</sup> / <sub>8</sub>	62	61 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	7	60	59 <sup>3</sup> / <sub>8</sub>	1 <sup>4</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	60 <sup>7</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	8	60 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	60 <sup>7</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	9	61	60	1 <sup>4</sup> / <sub>8</sub>	63	62	1 <sup>2</sup> / <sub>8</sub>
	10	62	60 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	64	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	12	62 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	13	62 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	1 <sup>4</sup> / <sub>8</sub>	64	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	14	62	60 <sup>3</sup> / <sub>8</sub>	1 <sup>4</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	62 <sup>4</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	15	62	60 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	16	61 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	63	62 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	17	62	61 <sup>1</sup> / <sub>2</sub>	1 <sup>4</sup> / <sub>8</sub>	64	63 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	19	64	62 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	66	64 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	20	63	61 <sup>7</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	65 <sup>5</sup> / <sub>8</sub>	63 <sup>7</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	21	65	63 <sup>1</sup> / <sub>2</sub>	1 <sup>4</sup> / <sub>8</sub>	67	65 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	22	65 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	67	65 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	23	67	65	2	68 <sup>1</sup> / <sub>4</sub>	66 <sup>5</sup> / <sub>8</sub>	1 <sup>2</sup> / <sub>8</sub>
	24	68	66 <sup>5</sup> / <sub>8</sub>	2	69	68 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	26	73	71	2	74 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	1 <sup>2</sup> / <sub>8</sub>
	27	77 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	79 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>2</sub>	2
	28	73	71 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	74	72 <sup>1</sup> / <sub>2</sub>	2
	29	71 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	70 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>
	30	71 <sup>1</sup> / <sub>2</sub>	69	2 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>4</sub>	70	2 <sup>1</sup> / <sub>4</sub>
July	3	78	75 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	79	76 <sup>1</sup> / <sub>8</sub>	3
	4	78	76 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	79	76 <sup>3</sup> / <sub>8</sub>	3
	5	78	75 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	79 <sup>1</sup> / <sub>4</sub>	76 <sup>1</sup> / <sub>4</sub>	3
	6	78	76 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	79	77 <sup>1</sup> / <sub>8</sub>	3
	7	79	77	2 <sup>1</sup> / <sub>8</sub>	80 <sup>1</sup> / <sub>4</sub>	77 <sup>1</sup> / <sub>4</sub>	3
	8	81 <sup>1</sup> / <sub>2</sub>	78 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	82 <sup>1</sup> / <sub>2</sub>	79 <sup>1</sup> / <sub>2</sub>	3
	10	82	80 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	83	81 <sup>1</sup> / <sub>2</sub>	3
	11	86	84	2 <sup>2</sup> / <sub>8</sub>	88	85 <sup>1</sup> / <sub>2</sub>	3
	12	86	84	2 <sup>2</sup> / <sub>8</sub>	88 <sup>1</sup> / <sub>8</sub>	85 <sup>5</sup> / <sub>8</sub>	3

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG 1ST SEPTEMBER, 1931 TO MAY 31ST, 1932—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
1933						
July 13.....	86 $\frac{7}{8}$	84 $\frac{3}{4}$	2 $\frac{1}{2}$	88 $\frac{1}{4}$	86	2 $\frac{1}{4}$
14.....	89	86 $\frac{1}{2}$	2 $\frac{1}{2}$	91	88 $\frac{3}{4}$	2 $\frac{1}{4}$
15.....	91	88 $\frac{1}{2}$	2 $\frac{1}{2}$	92 $\frac{1}{2}$	90 $\frac{1}{4}$	2 $\frac{1}{4}$
17.....	91 $\frac{7}{8}$	89	2 $\frac{1}{2}$	93 $\frac{1}{2}$	91 $\frac{1}{4}$	2 $\frac{1}{4}$
18.....	92 $\frac{5}{8}$	90 $\frac{1}{2}$	2 $\frac{1}{2}$	94	91 $\frac{1}{4}$	2 $\frac{1}{4}$
19.....	85 $\frac{1}{4}$	83 $\frac{1}{2}$	2 $\frac{1}{2}$	87 $\frac{1}{2}$	84 $\frac{1}{4}$	2 $\frac{1}{4}$
20.....	77	74 $\frac{1}{2}$	2 $\frac{1}{2}$	78 $\frac{1}{2}$	76	2 $\frac{1}{4}$
21.....	76 $\frac{1}{4}$	73 $\frac{1}{4}$	2 $\frac{1}{2}$	78 $\frac{1}{2}$	75 $\frac{1}{4}$	2 $\frac{1}{4}$
22.....	71 $\frac{1}{2}$	69 $\frac{1}{2}$	2 $\frac{1}{2}$	73 $\frac{3}{8}$	71 $\frac{1}{2}$	2 $\frac{1}{4}$
24.....	74 $\frac{1}{4}$	71 $\frac{1}{2}$	2 $\frac{1}{2}$	76 $\frac{1}{4}$	74 $\frac{1}{4}$	1 $\frac{1}{2}$
25.....	78 $\frac{3}{4}$	76 $\frac{1}{2}$	2 $\frac{1}{2}$	81 $\frac{1}{4}$	78 $\frac{1}{2}$	2 $\frac{1}{4}$
26.....	82 $\frac{3}{4}$	79	2 $\frac{1}{2}$	83 $\frac{3}{4}$	81 $\frac{1}{2}$	2 $\frac{1}{4}$
27.....	86 $\frac{5}{8}$	84 $\frac{1}{2}$	2 $\frac{1}{2}$	88 $\frac{5}{8}$	85 $\frac{1}{2}$	2 $\frac{1}{4}$
28.....	79 $\frac{7}{8}$	77 $\frac{1}{2}$	2 $\frac{1}{2}$	81 $\frac{1}{4}$	79 $\frac{1}{2}$	2 $\frac{1}{4}$
29.....	78	75 $\frac{1}{2}$	2 $\frac{1}{2}$	79 $\frac{3}{4}$	76 $\frac{1}{4}$	2 $\frac{1}{4}$
31.....	77	74 $\frac{1}{2}$	2 $\frac{1}{2}$	78 $\frac{5}{8}$	76 $\frac{1}{4}$	2 $\frac{1}{4}$

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN 1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND WINNIPEG

Aug.	1933					
1.....	86	83	3	87 $\frac{1}{2}$	85	2 $\frac{1}{2}$
2.....	82 $\frac{1}{4}$	79 $\frac{1}{4}$	3	83 $\frac{1}{4}$	81 $\frac{1}{4}$	2 $\frac{1}{4}$
3.....	82 $\frac{1}{4}$	79 $\frac{1}{4}$	3	83 $\frac{1}{4}$	81 $\frac{1}{4}$	2 $\frac{1}{4}$
4.....	79	76	3	79 $\frac{1}{2}$	77 $\frac{1}{2}$	2 $\frac{1}{4}$
5.....	80 $\frac{3}{4}$	77 $\frac{3}{4}$	3	81 $\frac{1}{4}$	79 $\frac{1}{4}$	2 $\frac{1}{4}$
8.....	77 $\frac{3}{4}$	74 $\frac{3}{4}$	3	78 $\frac{3}{4}$	76 $\frac{3}{4}$	2 $\frac{1}{4}$
9.....	78	75	3	79 $\frac{3}{4}$	77 $\frac{1}{4}$	2 $\frac{1}{4}$
10.....	78 $\frac{1}{2}$	75 $\frac{1}{2}$	3	80	78	2
11.....	74 $\frac{1}{4}$	71 $\frac{1}{4}$	3	76 $\frac{1}{4}$	74	2 $\frac{1}{4}$
12.....	68 $\frac{3}{4}$	65 $\frac{1}{4}$	3	70 $\frac{1}{4}$	68 $\frac{3}{4}$	2 $\frac{1}{4}$
14.....	66 $\frac{1}{4}$	63 $\frac{3}{4}$	3	68 $\frac{1}{4}$	66 $\frac{1}{4}$	1 $\frac{1}{2}$
15.....	67 $\frac{1}{2}$	64 $\frac{1}{2}$	3	69 $\frac{1}{2}$	67 $\frac{1}{2}$	1 $\frac{1}{2}$
16.....	66 $\frac{3}{4}$	63 $\frac{3}{4}$	3	68 $\frac{1}{4}$	66 $\frac{1}{4}$	2
17.....	68 $\frac{3}{4}$	65 $\frac{3}{4}$	3	70 $\frac{3}{4}$	69	1 $\frac{1}{2}$
18.....	66 $\frac{3}{4}$	63 $\frac{3}{4}$	3	68 $\frac{3}{4}$	66 $\frac{3}{4}$	1 $\frac{1}{2}$
19.....	67 $\frac{3}{4}$	64 $\frac{3}{4}$	3	69 $\frac{3}{4}$	67 $\frac{3}{4}$	1 $\frac{1}{2}$
21.....	67	64	3	69 $\frac{1}{4}$	67 $\frac{1}{4}$	1 $\frac{1}{2}$
22.....	67 $\frac{1}{2}$	64 $\frac{1}{2}$	3	69 $\frac{1}{2}$	67 $\frac{1}{2}$	1 $\frac{1}{2}$
23.....	66 $\frac{3}{4}$	63 $\frac{3}{4}$	3	69	67	2
24.....	66 $\frac{1}{4}$	63 $\frac{1}{4}$	3	68 $\frac{3}{4}$	66 $\frac{3}{4}$	2
25.....	67 $\frac{1}{2}$	64 $\frac{1}{2}$	3	69 $\frac{1}{2}$	67 $\frac{1}{2}$	2 $\frac{1}{4}$
26.....	68	65 $\frac{1}{2}$	3	70	68	2 $\frac{1}{4}$
28.....	67 $\frac{1}{2}$	64 $\frac{1}{2}$	3	69 $\frac{1}{2}$	67 $\frac{1}{2}$	2 $\frac{1}{4}$
29.....	66 $\frac{1}{4}$	63 $\frac{1}{4}$	3	68 $\frac{1}{4}$	66 $\frac{1}{4}$	2 $\frac{1}{4}$
30.....	67 $\frac{1}{4}$	64 $\frac{1}{4}$	3	69 $\frac{1}{4}$	67 $\frac{1}{4}$	2 $\frac{1}{4}$
31.....	66 $\frac{3}{4}$	63 $\frac{3}{4}$	3	68 $\frac{3}{4}$	66 $\frac{3}{4}$	2 $\frac{1}{4}$
Sept. 1.....	67 $\frac{3}{4}$	64 $\frac{3}{4}$	2 $\frac{3}{4}$	69 $\frac{3}{4}$	67 $\frac{3}{4}$	2 $\frac{1}{4}$
5.....	67 $\frac{1}{2}$	65 $\frac{1}{2}$	2 $\frac{1}{2}$	69	67	2
6.....	67 $\frac{1}{2}$	65 $\frac{1}{2}$	2 $\frac{1}{2}$	69	67 $\frac{1}{2}$	1 $\frac{1}{2}$
7.....	67 $\frac{1}{2}$	65 $\frac{1}{2}$	2 $\frac{1}{2}$	69 $\frac{1}{2}$	67 $\frac{1}{2}$	1 $\frac{1}{2}$
8.....	67 $\frac{1}{2}$	65 $\frac{1}{2}$	2 $\frac{1}{2}$	69	67 $\frac{1}{2}$	1 $\frac{1}{2}$
9.....	67 $\frac{1}{2}$	64 $\frac{1}{2}$	2 $\frac{1}{4}$	69 $\frac{1}{2}$	67 $\frac{1}{2}$	1 $\frac{1}{2}$
11.....	67 $\frac{1}{4}$	64 $\frac{1}{4}$	2 $\frac{1}{4}$	69 $\frac{1}{4}$	67 $\frac{1}{4}$	1 $\frac{1}{2}$
12.....	67 $\frac{1}{4}$	64 $\frac{1}{4}$	2 $\frac{1}{4}$	69 $\frac{1}{4}$	67 $\frac{1}{4}$	1 $\frac{1}{2}$
13.....	67 $\frac{1}{4}$	64 $\frac{1}{4}$	2 $\frac{1}{4}$	69 $\frac{1}{4}$	67 $\frac{1}{4}$	2
14.....	63 $\frac{1}{4}$	61 $\frac{1}{4}$	2 $\frac{1}{4}$	66 $\frac{1}{4}$	64 $\frac{1}{4}$	2 $\frac{1}{4}$
15.....	64	62	2	66 $\frac{1}{4}$	64 $\frac{1}{4}$	2
16.....	65 $\frac{1}{4}$	63 $\frac{1}{4}$	2 $\frac{1}{4}$	68 $\frac{1}{4}$	66 $\frac{1}{4}$	2
18.....	67 $\frac{1}{4}$	65 $\frac{1}{4}$	2 $\frac{1}{4}$	69 $\frac{1}{4}$	67 $\frac{1}{4}$	2
19.....	67 $\frac{1}{2}$	65 $\frac{1}{2}$	2 $\frac{1}{2}$	70	68	2



COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN  
1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND  
WINNIPEG—Continued

Date		Closing Price			Closing Price		
		Vancouver			Winnipeg		
		1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
		cents			cents		
Sept.	1933						
	20	66 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	68 <sup>7</sup> / <sub>8</sub>	66 <sup>7</sup> / <sub>8</sub>	2
	21	64 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	67 <sup>1</sup> / <sub>2</sub>	65	2 <sup>1</sup> / <sub>4</sub>
	22	63 <sup>1</sup> / <sub>2</sub>	60 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>
	23	63 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	66 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>
	25	64 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	67	65	2
	26	61 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>
	27	60 <sup>1</sup> / <sub>2</sub>	58	2 <sup>1</sup> / <sub>4</sub>	63	60	2 <sup>1</sup> / <sub>4</sub>
	28	58 <sup>3</sup> / <sub>4</sub>	56 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	59	2 <sup>1</sup> / <sub>4</sub>
	29	59 <sup>7</sup> / <sub>8</sub>	57 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>
Oct.	30	59 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	59	2 <sup>1</sup> / <sub>4</sub>
	2	58 <sup>3</sup> / <sub>4</sub>	56	2 <sup>3</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	59	2 <sup>1</sup> / <sub>4</sub>
	3	57 <sup>1</sup> / <sub>2</sub>	54 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	58 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>
	4	57 <sup>3</sup> / <sub>4</sub>	54 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	59	2 <sup>1</sup> / <sub>4</sub>
	5	57 <sup>3</sup> / <sub>4</sub>	54 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	59	2 <sup>1</sup> / <sub>4</sub>
	6	56	53 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>	59 <sup>5</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>
	7	56 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	3	60 <sup>1</sup> / <sub>2</sub>	58	2 <sup>1</sup> / <sub>4</sub>
	10	56 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	3	60 <sup>3</sup> / <sub>4</sub>	58	2 <sup>1</sup> / <sub>4</sub>
	11	56	53	3	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>
	12	55 <sup>7</sup> / <sub>8</sub>	52 <sup>7</sup> / <sub>8</sub>	3	60 <sup>1</sup> / <sub>2</sub>	57 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>
	13	53 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>2</sub>	3	57 <sup>7</sup> / <sub>8</sub>	55	2 <sup>1</sup> / <sub>4</sub>
	14	51 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>8</sub>	3	55 <sup>5</sup> / <sub>8</sub>	53	2 <sup>1</sup> / <sub>4</sub>
	16	52	48 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>2</sub>	51 <sup>7</sup> / <sub>8</sub>	3
	17	54 <sup>1</sup> / <sub>2</sub>	51 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	54 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>
	18	55 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	58	54 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>
	19	54 <sup>1</sup> / <sub>2</sub>	51 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	54 <sup>1</sup> / <sub>2</sub>	3
	20	56 <sup>1</sup> / <sub>2</sub>	53 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	59 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	3
	21	58 <sup>3</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	58 <sup>3</sup> / <sub>4</sub>	3
	23	61 <sup>5</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	3
	24	60 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	63 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	3
	25	62 <sup>1</sup> / <sub>2</sub>	58 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>	65 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	3
	26	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4	63 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	3
	27	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4	64 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	3
	28	60	56	4	62 <sup>3</sup> / <sub>4</sub>	59	3
	30	59 <sup>3</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	4	62	59	3
	31	59 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	4	61 <sup>7</sup> / <sub>8</sub>	58 <sup>7</sup> / <sub>8</sub>	3
Nov.	1	59 <sup>3</sup> / <sub>8</sub>	55 <sup>3</sup> / <sub>8</sub>	4	62 <sup>3</sup> / <sub>4</sub>	59	3
	2				64 <sup>3</sup> / <sub>4</sub>	61	2 <sup>3</sup> / <sub>4</sub>
	3	61 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	4	64 <sup>1</sup> / <sub>2</sub>	61	2 <sup>3</sup> / <sub>4</sub>
	4	60 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>4</sub>	4	63 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
	6	60	56	4	62 <sup>7</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	7	59 <sup>5</sup> / <sub>8</sub>	55 <sup>5</sup> / <sub>8</sub>	4	62 <sup>3</sup> / <sub>4</sub>	59	2 <sup>3</sup> / <sub>4</sub>
	8	62 <sup>3</sup> / <sub>4</sub>	58 <sup>3</sup> / <sub>4</sub>	4	64 <sup>1</sup> / <sub>2</sub>	61	3
	9	63 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	4	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>
	10	61 <sup>3</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	4	64 <sup>1</sup> / <sub>2</sub>	61	2 <sup>3</sup> / <sub>4</sub>
	13	62	58	4	64 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	14	63 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>8</sub>	4	65 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	15	62 <sup>7</sup> / <sub>8</sub>	58 <sup>7</sup> / <sub>8</sub>	4	64 <sup>3</sup> / <sub>4</sub>	62	2 <sup>3</sup> / <sub>4</sub>
	16	64 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	66 <sup>3</sup> / <sub>4</sub>	63 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
	17	63 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	64 <sup>3</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	18	62	58 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	64	61	2 <sup>3</sup> / <sub>4</sub>
	20	63	59 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>2</sub>	62	2 <sup>3</sup> / <sub>4</sub>
	21	63 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>2</sub>	62	2 <sup>3</sup> / <sub>4</sub>
	22	63 <sup>7</sup> / <sub>8</sub>	59 <sup>7</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	64 <sup>5</sup> / <sub>8</sub>	61 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>
	23	62 <sup>5</sup> / <sub>8</sub>	58 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	63 <sup>5</sup> / <sub>8</sub>	60 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>
	24	63 <sup>1</sup> / <sub>2</sub>	58 <sup>7</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	63 <sup>5</sup> / <sub>8</sub>	60 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>
	25	62 <sup>1</sup> / <sub>2</sub>	58	4 <sup>1</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	3
	27	60 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3
	28	59 <sup>1</sup> / <sub>2</sub>	55	4 <sup>1</sup> / <sub>2</sub>	59 <sup>7</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>
	29	60 <sup>7</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	61 <sup>3</sup> / <sub>8</sub>	58 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>
	30	60 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	57	3 <sup>1</sup> / <sub>4</sub>
Dec.	1	59 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	2	58 <sup>1</sup> / <sub>2</sub>	54	4 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
	4	58 <sup>3</sup> / <sub>4</sub>	54 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>4</sub>	3
	5	59 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3
	6	59 <sup>1</sup> / <sub>2</sub>	55 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	3
	7	60 <sup>1</sup> / <sub>2</sub>	55 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3
	8	59 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	3

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN  
1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND  
WINNIPEG—Continued

Date	Closing Price			Closing Price		
	Vancouver			Winnipeg		
	1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
			cents			cents
1933						
Dec. 9	60 $\frac{3}{4}$	55 $\frac{1}{4}$	4 $\frac{1}{2}$	60 $\frac{3}{4}$	57 $\frac{3}{4}$	3
11	60 $\frac{7}{8}$	56 $\frac{3}{4}$	4 $\frac{1}{2}$	61 $\frac{1}{4}$	58 $\frac{1}{4}$	3
12	60 $\frac{7}{8}$	56 $\frac{3}{4}$	4 $\frac{1}{2}$	61 $\frac{1}{4}$	58 $\frac{1}{4}$	3
13	59 $\frac{5}{8}$	55 $\frac{1}{2}$	4 $\frac{1}{2}$	60 $\frac{1}{4}$	57 $\frac{1}{4}$	3
14	59 $\frac{1}{2}$	54 $\frac{5}{8}$	4 $\frac{1}{2}$	59 $\frac{3}{4}$	56 $\frac{3}{4}$	3
15	59 $\frac{1}{2}$	54 $\frac{5}{8}$	4 $\frac{1}{2}$	59 $\frac{5}{8}$	56 $\frac{1}{2}$	3
16	58 $\frac{7}{8}$	54 $\frac{3}{4}$	4 $\frac{1}{2}$	59 $\frac{1}{2}$	56 $\frac{1}{2}$	3
18	58 $\frac{3}{4}$	54 $\frac{1}{2}$	4 $\frac{1}{2}$	58 $\frac{7}{8}$	55 $\frac{7}{8}$	3
19	59	54 $\frac{1}{2}$	4 $\frac{1}{2}$	59 $\frac{1}{2}$	56 $\frac{1}{2}$	3
20	58 $\frac{3}{4}$	53 $\frac{7}{8}$	4 $\frac{1}{2}$	58 $\frac{7}{8}$	55 $\frac{5}{8}$	3
21	58 $\frac{1}{4}$	53 $\frac{3}{4}$	4 $\frac{1}{2}$	58 $\frac{7}{8}$	55 $\frac{7}{8}$	3
22	59 $\frac{1}{2}$	55 $\frac{5}{8}$	4 $\frac{1}{2}$	60 $\frac{3}{4}$	57 $\frac{3}{4}$	3
23	60 $\frac{1}{2}$	56 $\frac{1}{2}$	4 $\frac{1}{2}$	61 $\frac{5}{8}$	58 $\frac{3}{8}$	3
27	61 $\frac{3}{4}$	57 $\frac{1}{4}$	4 $\frac{1}{2}$	63 $\frac{1}{4}$	60 $\frac{1}{4}$	3
28	61 $\frac{1}{4}$	57 $\frac{1}{4}$	4 $\frac{1}{2}$	63 $\frac{1}{4}$	60 $\frac{1}{4}$	3
29	60 $\frac{1}{2}$	55 $\frac{3}{4}$	4 $\frac{3}{4}$	61	58	3
30	61 $\frac{1}{4}$	56 $\frac{3}{4}$	4 $\frac{3}{4}$	61 $\frac{1}{8}$	58 $\frac{1}{8}$	3
1934						
Jan. 2	61 $\frac{5}{8}$	56 $\frac{7}{8}$	4 $\frac{3}{4}$	61 $\frac{5}{8}$	58 $\frac{5}{8}$	3
3	61 $\frac{7}{8}$	57 $\frac{1}{8}$	4 $\frac{3}{4}$	62 $\frac{1}{8}$	59 $\frac{1}{8}$	3
4	62 $\frac{7}{8}$	58 $\frac{1}{8}$	4 $\frac{3}{4}$	62 $\frac{7}{8}$	59 $\frac{7}{8}$	3
5	62 $\frac{1}{2}$	57 $\frac{7}{8}$	4 $\frac{3}{4}$	62 $\frac{3}{8}$	59 $\frac{3}{8}$	3
6	63	58 $\frac{1}{2}$	4 $\frac{3}{4}$	63	60	3
8	62 $\frac{5}{8}$	57 $\frac{7}{8}$	4 $\frac{3}{4}$	62 $\frac{3}{8}$	59 $\frac{5}{8}$	3
9	62 $\frac{1}{4}$	58 $\frac{1}{4}$	4 $\frac{3}{4}$	62 $\frac{1}{4}$	59 $\frac{7}{8}$	3
10	63 $\frac{3}{4}$	58 $\frac{7}{8}$	4 $\frac{3}{4}$	63 $\frac{1}{4}$	60 $\frac{7}{8}$	3
11	63 $\frac{3}{4}$	58 $\frac{7}{8}$	4 $\frac{3}{4}$	63 $\frac{1}{4}$	60 $\frac{7}{8}$	3
12	64 $\frac{3}{4}$	59 $\frac{3}{4}$	4 $\frac{3}{4}$	64 $\frac{1}{4}$	61 $\frac{1}{4}$	3
13	65 $\frac{1}{2}$	60 $\frac{1}{2}$	4 $\frac{3}{4}$	65 $\frac{1}{2}$	62 $\frac{1}{2}$	3
15	67 $\frac{3}{4}$	62 $\frac{5}{8}$	4 $\frac{3}{4}$	67 $\frac{3}{4}$	64 $\frac{5}{8}$	3
16	66 $\frac{1}{2}$	61 $\frac{1}{2}$	4 $\frac{3}{4}$	66 $\frac{1}{2}$	63 $\frac{1}{2}$	3
17	66 $\frac{1}{2}$	62	4 $\frac{3}{4}$	67	64	3
18	65 $\frac{7}{8}$	61 $\frac{1}{8}$	4 $\frac{3}{4}$	66 $\frac{1}{2}$	63 $\frac{1}{2}$	3
19	66 $\frac{1}{2}$	61 $\frac{1}{2}$	4 $\frac{3}{4}$	66 $\frac{1}{2}$	63 $\frac{1}{2}$	3
20	65 $\frac{3}{4}$	61 $\frac{1}{4}$	4 $\frac{3}{4}$	66 $\frac{1}{2}$	63 $\frac{1}{2}$	3
22	65 $\frac{3}{4}$	60 $\frac{5}{8}$	4 $\frac{3}{4}$	65 $\frac{3}{4}$	62 $\frac{5}{8}$	3
23	65 $\frac{3}{4}$	60 $\frac{7}{8}$	4 $\frac{3}{4}$	65 $\frac{3}{4}$	62 $\frac{7}{8}$	3
24	65 $\frac{3}{4}$	60 $\frac{5}{8}$	4 $\frac{3}{4}$	65 $\frac{3}{4}$	62 $\frac{5}{8}$	3
25	64 $\frac{5}{8}$	59 $\frac{5}{8}$	5	64 $\frac{5}{8}$	61 $\frac{7}{8}$	3
26	65	60	5	65 $\frac{3}{4}$	62 $\frac{3}{4}$	3
27	65 $\frac{1}{2}$	60	5 $\frac{1}{2}$	66	63	3
29	66 $\frac{1}{2}$	61 $\frac{3}{8}$	5 $\frac{1}{2}$	67 $\frac{1}{2}$	64 $\frac{1}{4}$	3
30	66 $\frac{1}{2}$	61	5 $\frac{1}{2}$	66 $\frac{7}{8}$	63 $\frac{7}{8}$	3
31	66 $\frac{1}{2}$	61	5 $\frac{1}{2}$	66 $\frac{1}{2}$	63 $\frac{7}{8}$	3
Feb. 1	67	61 $\frac{1}{2}$	5 $\frac{1}{2}$	67	64 $\frac{1}{2}$	3
2	66 $\frac{1}{2}$	61	5 $\frac{1}{2}$	66 $\frac{7}{8}$	63 $\frac{7}{8}$	3
3	66 $\frac{1}{2}$	61 $\frac{1}{4}$	5 $\frac{1}{2}$	67 $\frac{1}{2}$	64 $\frac{1}{2}$	3
5	66 $\frac{1}{2}$	60 $\frac{3}{4}$	5 $\frac{1}{2}$	66 $\frac{1}{2}$	63 $\frac{7}{8}$	3
6	66 $\frac{3}{8}$	60 $\frac{5}{8}$	5 $\frac{3}{4}$	66 $\frac{3}{4}$	63 $\frac{3}{4}$	3
7	65 $\frac{7}{8}$	60 $\frac{1}{2}$	5 $\frac{1}{2}$	66 $\frac{1}{2}$	63 $\frac{1}{4}$	3
8	65 $\frac{7}{8}$	60 $\frac{1}{2}$	5 $\frac{1}{2}$	66 $\frac{1}{2}$	63 $\frac{1}{4}$	3
9	65 $\frac{5}{8}$	59 $\frac{7}{8}$	5 $\frac{3}{4}$	66	63	3
10	65 $\frac{5}{8}$	59 $\frac{7}{8}$	5 $\frac{3}{4}$	65 $\frac{3}{4}$	62 $\frac{3}{4}$	3
12	65 $\frac{5}{8}$	59 $\frac{7}{8}$	5 $\frac{3}{4}$	66	63	3
13	64 $\frac{7}{8}$	59 $\frac{1}{8}$	5 $\frac{3}{4}$	65 $\frac{1}{4}$	62 $\frac{1}{4}$	3
14	65 $\frac{5}{8}$	59 $\frac{1}{8}$	6	65 $\frac{1}{4}$	62 $\frac{1}{4}$	3
15	65 $\frac{1}{2}$	59 $\frac{1}{2}$	6	65 $\frac{1}{2}$	62 $\frac{1}{2}$	3
16	65 $\frac{1}{4}$	59 $\frac{1}{4}$	6	65 $\frac{1}{2}$	62 $\frac{1}{2}$	3
17	65 $\frac{1}{2}$	59 $\frac{1}{2}$	6 $\frac{1}{4}$	65 $\frac{1}{2}$	62 $\frac{1}{2}$	3
19	65 $\frac{1}{4}$	59	6 $\frac{1}{4}$	65 $\frac{1}{2}$	62 $\frac{1}{2}$	3
20	64 $\frac{1}{2}$	58 $\frac{1}{4}$	6 $\frac{1}{4}$	64	61	3
21	64 $\frac{1}{4}$	58	6 $\frac{1}{4}$	64	61	3
22	64 $\frac{1}{4}$	58 $\frac{5}{8}$	6 $\frac{1}{4}$	64 $\frac{1}{4}$	61 $\frac{1}{4}$	3
23	64 $\frac{1}{4}$	58 $\frac{1}{4}$	6 $\frac{1}{4}$	64	61	3
24	64 $\frac{1}{4}$	58 $\frac{1}{2}$	6 $\frac{1}{4}$	64	61	3
26	64 $\frac{1}{2}$	58 $\frac{1}{2}$	6 $\frac{1}{4}$	64 $\frac{1}{2}$	61 $\frac{1}{2}$	2 $\frac{3}{4}$
27	65 $\frac{1}{2}$	59 $\frac{3}{8}$	6 $\frac{1}{4}$	65 $\frac{1}{2}$	62 $\frac{3}{8}$	2 $\frac{3}{4}$
28	65 $\frac{1}{2}$	59 $\frac{1}{2}$	6	65 $\frac{1}{2}$	62 $\frac{3}{8}$	2 $\frac{3}{4}$

COMPARATIVE CASH PRICES AT CLOSE OF MARKET AND SPREADS BETWEEN  
1 NORTHERN AND 2 NORTHERN WHEAT AT VANCOUVER AND  
WINNIPEG—Concluded

Date		Closing Price			Closing Price		
		Vancouver			Winnipeg		
		1 Northern	2 Northern	Spread	1 Northern	2 Northern	Spread
		cents			cents		
Mar.	1934						
	1	65 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	6	65 <sup>1</sup> / <sub>2</sub>	62 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>
	2	67 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	64	2 <sup>3</sup> / <sub>4</sub>
	3	67 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	67	64 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
	5	68 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	67	64 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
	6	68 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	64	2 <sup>3</sup> / <sub>4</sub>
	7	67 <sup>5</sup> / <sub>8</sub>	61 <sup>7</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>8</sub>	63 <sup>5</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>
	8	67 <sup>7</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>8</sub>	63 <sup>7</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>
	9	68 <sup>3</sup> / <sub>8</sub>	63	5 <sup>5</sup> / <sub>8</sub>	67 <sup>3</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>
	10	69	63 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	67 <sup>3</sup> / <sub>8</sub>	65	2 <sup>7</sup> / <sub>8</sub>
	12	68 <sup>7</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	67 <sup>5</sup> / <sub>8</sub>	64 <sup>7</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>
	13	68	62 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>5</sup> / <sub>8</sub>	64	2 <sup>3</sup> / <sub>4</sub>
	14	67	61 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>8</sub>
	15	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>3</sup> / <sub>4</sub>	62 <sup>7</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>
	16	66 <sup>1</sup> / <sub>2</sub>	61	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63	2 <sup>7</sup> / <sub>8</sub>
	17	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66	63	2 <sup>7</sup> / <sub>8</sub>
	19	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>3</sup> / <sub>4</sub>	62 <sup>7</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>
	20	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>3</sup> / <sub>4</sub>	62	2 <sup>7</sup> / <sub>8</sub>
	21	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>5</sup> / <sub>8</sub>	63	2 <sup>7</sup> / <sub>8</sub>
	22	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66	63 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>
	23	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>7</sup> / <sub>8</sub>	63	2 <sup>7</sup> / <sub>8</sub>
	24	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>
	26	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63	2 <sup>7</sup> / <sub>8</sub>
	27	65 <sup>7</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	65 <sup>7</sup> / <sub>8</sub>	63	2 <sup>7</sup> / <sub>8</sub>
	28	61 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>
	29	66	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>1</sup> / <sub>2</sub>	63	3
	31	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>8</sub>	63	3
April	2	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>8</sub>	63	3
	3	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	6	66 <sup>3</sup> / <sub>8</sub>	63	3
	4	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	6	66 <sup>3</sup> / <sub>8</sub>	63	3
	5	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	6	66 <sup>3</sup> / <sub>8</sub>	63	3
	6	65 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	6	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	3
	7	65 <sup>3</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	6	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	3
	9	65 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	6	66	63	3
	10	66 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	6	66 <sup>7</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	3
	11	66 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>	6	67	64	3
	12	65 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	6	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	3
	13	65 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	6	66 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	3
	14	64 <sup>5</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	65 <sup>3</sup> / <sub>4</sub>	62 <sup>3</sup> / <sub>4</sub>	3
	16	64 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	65 <sup>3</sup> / <sub>4</sub>	62 <sup>3</sup> / <sub>4</sub>	3
	17	63 <sup>3</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>4</sub>	64 <sup>3</sup> / <sub>8</sub>	61 <sup>3</sup> / <sub>8</sub>	3
	18	63 <sup>1</sup> / <sub>4</sub>	57 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	64 <sup>5</sup> / <sub>8</sub>	61 <sup>5</sup> / <sub>8</sub>	3
	19	62 <sup>1</sup> / <sub>2</sub>	57	5 <sup>1</sup> / <sub>2</sub>	63	60 <sup>1</sup> / <sub>2</sub>	3
	20	62 <sup>5</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>8</sub>	3
	21	63 <sup>5</sup> / <sub>8</sub>	58 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>4</sub>	3
	23	63	57 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	64 <sup>3</sup> / <sub>8</sub>	61 <sup>3</sup> / <sub>8</sub>	3
	24	62 <sup>5</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	64 <sup>3</sup> / <sub>8</sub>	61 <sup>3</sup> / <sub>8</sub>	3
	25	62 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	5	64 <sup>1</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>4</sub>	3
	26	62 <sup>1</sup> / <sub>2</sub>	58 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>4</sub>	3
	27	62 <sup>3</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	3
	28	62 <sup>7</sup> / <sub>8</sub>	58 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	65	62	3
	30	62	58 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>8</sub>	3

Mr. DONNELLY: I think what the Minister has said is very important, that the statement should go back from 1925 before Garnet came in.

The CHAIRMAN: Gentlemen, the Minister in charge—Mr. Stevens—is naturally a busy man, as you know. I think possibly we can meet next Wednesday, if not before, to have the Minister with us.

Mr. VALLANCE: Is it possible for us to meet without the Minister? I know he is needed at Price Spreads but he is also needed here. This means just as much as price spreads, at least to some of us.

The committee adjourned at 1.05 to resume at the call of the Chair.



**APPENDIX A****LIST OF MEMBERS VANCOUVER GRAIN EXPORTERS'  
ASSOCIATION**

Messrs. Canada Grain Export Co. Ltd.; Bunge North American Grain Corporation, Canadian Agency Ltd.; James Richardson & Sons, Ltd.; Smith-Murphy, Milroy Ltd.; Midland Pacific Terminal Limited; Continental Grain Co. (Canada) Ltd.; Continental Grain Co. Inc.; Continental Grain Co.; F. W. Rudolph; Louis Dreyfus & Co.; Grain Growers Export Co. Ltd.; Kerr Gifford & Co. Inc.; Hall Grain Company Limited; Earle & Stoddart Ltd.; Sanday & Co. Ltd.









SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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WEDNESDAY, MAY 16, 1934

No. 4

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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## WITNESSES:

Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners.

Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners of  
Canada.

OTTAWA  
J. O. PATENAUDE  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1934





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,  
MAY 16th, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon, Mr. Senn, the Chairman, presiding.

Members present:—Messieurs, Barber, Bertrand, Blair, Bowen, Boyce, Brown, Carmichael, Davies, Donnelly, Dupuis, Fafard, Garland (Bow River), Gobeil, Golding, Hall, Loucks, Lucas, McGillis, McKenzie (Assiniboia), Moore (Chateauguay-Huntingdon), Motherwell, Mullins, Myers, Perley (Qu'Appelle), Pickel, Porteous, Seguin, Senn, Shaver, Simpson (Simcoe North), Smith (Victoria-Carlton), Spotton, Sproule, Stewart (Lethbridge), Stirling, Swanston, Taylor, Totzke, Tummon, Vallance, Weese, Weir (Macdonald), the Honourable Mr. Weir, minister of Agriculture. (44).

In attendance:—Hon. H. H. Stevens, Minister of Trade and Commerce; Mr. C. M. Hamilton, Commissioner, Board of Grain Commissions for Canada; Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners.

The Committee proceeded to consider Bill No. 53, an Act to amend the Canada Grain Act.

Moved by Mr. Dupuis that a sub-committee composed of the western members of this committee be appointed to deal with the question of the separate grading of Garnet Wheat and to report back to this Committee.

Motion defeated on division 19 Ayes, 4 Nays.

On motion of Mr. Carmichael it was resolved that a sub-committee of seven members of this Committee be appointed to decide upon the evidence to be asked for having regard to the evidence given at the former investigation into this subject in 1932 by this Committee.

The Chairman then named the following members as a sub-committee for this purpose:—Messieurs Carmichael, Vallance, Loucks, Perley, Davies, Motherwell and the Hon. Mr. Weir.

The Committee then adjourned to meet again at the call of the Chair.

WALTER HILL,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

Room 429,

May 16, 1934.

The select standing committee on Agriculture met at 10.30 a.m. Mr. Senn presiding.

The CHAIRMAN: Gentlemen, we will proceed. We are considering Bill 53 and the question is on section 1 and section 2 of the Bill. Mr. Stevens wishes to make a short statement and Mr. Motherwell also wishes to make a statement.

Hon. Mr. STEVENS: Mr. Chairman and gentlemen, I again desire to make it clear to the committee that I am not desirous of entering into any controversy whatever about the question of the merits of Garnet wheat. In submitting the bill I have one purpose only; that is to give effect to what is considered the opinion of the Board of Grain Commissioners and my own department, and with one object alone in view which is to properly conserve the reputation of Canadian wheat abroad. That is the angle I am looking at. I want to say to the committee before I read one further item that came to my office this week, that it is my considered opinion as Minister of Trade and Commerce that there is a danger of the very high reputation of Canadian wheat being permanently injured unless we take due steps to preserve that standard; and, in my opinion, this Bill is an essential to the achievement of that end.

Now, yesterday, May 14, we received a report from Mr. McGillvray, one of the best trade commissioners we have in the service. He is located in Rotterdam, and Rotterdam is one of the main points to which our wheat goes on the continent of Europe; and Mr. McGillvray is one of the most experienced and one of the sanest and most reliable and efficient trade commissioners we have in the service. This is entirely unsolicited and is simply a part of his routine report, and I will read it to you and you can take it for what it is worth:—

Rotterdam grain importers complain that arrivals of 2 Northern wheat from the Pacific during the current season show a much lower gluten content than in previous years. The gluten content of the same grade when shipped from the Atlantic is not unsatisfactory. As a result buyers do not want number 2 Manitoba wheat when shipped from the Pacific and it has dropped to as much as 4 to 4½ cents per bushel below the same grade from the Atlantic. The difference in the quality of gluten in the other grades from the Pacific as compared with the Atlantic is much less pronounced than with number 2.

I have another communication received by the Grain Commission, and I am reading this for one purpose which I would like to impress upon the committee—and if the press are present I would rather they did not mention it—and that is that it has to do with the tendency in Great Britain for the large milling industries, a tremendously influential and powerful body, to use less Canadian wheats. This communication reads as follows:—

There is a determined effort being made here on the part of the English millers to induce Scotch bakers—

And by the way I want to point out that the Scotch baking industry has been one of the largest users of Canadian wheats—

—to induce Scotch bakers to leave what is called the “long process” and adopt the “short process” in making. For the latter purpose a blended



flour made largely from Australian, Plates, Russians and all sorts of non-descript wheat with a small percentage of Manitobas to secure the necessary strength can be used. This is the sort of flour which English mills are producing and we are out to compete it by supplying the baker with a strong, pure, Manitoban flour essential to him in the "long process"—

And it may be pointed out that that has to do with the long and short baking processes mentioned here the other day. There is no question about it that the question of wheat enters into it—

—you can see therefore that it is the interest not only of ourselves but of all Canadian Wheat producers, indeed Canadian mills also, that there should be nothing which would cause the baker to waver in his determination to continue in his use of strong flour.

In other words, to continue the use of that class of wheat which will produce strong flour.

Mr. VALLANCE: May I ask the Minister to tell us whom that is from?

Hon. Mr. STEVENS: Yes, it is from Snodgrass. I am going to leave this committee to determine this matter and take the responsibility. As far as I am concerned, I want once again to try to leave the impression on the minds of the committee that I am not in my argument referring to the merits of this or that class of wheat, but it is our considered opinion that if we do not take some steps to grade Garnet separately and let it take its own position on its own merits, then I think you are prejudicing the high standing that Canadian hard wheat has had upon the markets of the world, and as far as I am concerned I shall not bear the responsibility of continuing that condition, because two years ago I was impressed with it. So I come to you now and say that as far as I am concerned this is my last word; the committee can make its own decision. There is no need of me sitting here. Mr. Fraser, the chief inspector, is here and Mr. Hamilton will be here, and those gentlemen can answer any technical question on the question of grading that you wish to ask as far as the Grain Commission is concerned. I cannot answer those questions any farther. I will leave the matter in your hands and the committee can deal with it as in its wisdom it sees fit.

The CHAIRMAN: Thank you, Mr. Stevens. I might say to the committee that it is unfortunate that the evidence of our last meeting is not yet in print. There was some delay, but it will be in your boxes sometime to-day. Now, Mr. Motherwell would like to make a statement.

Hon. Mr. MOTHERWELL: Mr. Chairman, members of the committee: I do not want to make a speech, but, like several other members, I am endeavouring at least to approach this matter with an open mind—that is, if it is possible to have an entirely open mind upon a subject that you have previously had almost a closed mind upon. Like the Minister who has just retired, busy, no doubt, as most of us are, I will not, I hope, engage in any controversial discussion. Conditions are too serious in our country for us to quarrel on these important matters. It would be far better for us to look for points upon which we can reach an agreement if possible, and this is one of them. This is a very important matter to a good many western farmers living in the northern portion of the prairie provinces particularly. This year alone, on the basis of the crop estimated by Mr. Fraser of 340,000,000 bushels, we would have something like 47,000,000 bushels of Garnet wheat to dispose of. That must affect a very large number of farmers. What I am going to deal with is not so much the merits or demerits of Garnet as a milling wheat as with the manner in which the Bill proposes to dispose of the question by passing it to the Grain Standards Board. That looks very much like passing the buck to George and letting him do it. Is not this too important a question to pass for the second time, if not the third time, back to the same tribunal?

I was struck with the remarks of Mr. Hamilton the other day that the Board of Grain Commissioners on the 8th of January had recommended that nothing be done during the session with regard to Garnet wheat. Then some supplementary evidence came to his attention, one item of which was dated the 10th of April. I would draw the committee's attention to the fact that the Bill was brought down on the 9th of April, so the supplementary evidence came in a little late. The other supplementary evidence came down on the 16th of February, and it was from a chemist representing a number of millers, was it not?

Mr. HAMILTON: Yes.

Hon. Mr. MOTHERWELL: We would like to have the millers' testimony in regard to this matter more than that of chemists. You can get pretty nearly any kind of report from a chemist depending upon what phase of the matter a chemist is dealing with. I can bring you the statement of a chemist stating that a blend of Marquis and Garnet will make a more satisfactory flour than either of them alone. Now, I do not know whether we can take such an opinion any more than we can take this one. You can see that such opinions are not worth very much—a chemist's version of a matter of this kind. There has been a lot of propaganda against Garnet wheat in the last four years or possibly five years, particularly by the Canadian Millers' Association of Canada. I think Mr. Short is the president, or he used to be. And it is rather a significant fact that Mr. Short apparently started off in February on a tour from Vancouver, and immediately after he left there a recommendation comes in, or about that time, against Garnet wheat—they are afraid that their port is going to be hurt if Garnet assumes too large a volume at that port. Then we find the same Mr. Short at Calgary, and he begins by telling the prairie farmers that it is not fair to have the fine southern wheats mixed with the lowest quality of wheat from the north, particularly Garnet, and he describes the burdened farmers of the south carrying the northern farmers on their backs, and he uses that illustration all through from the prairies down to Montreal, and then it appears, a great part of it, in the *Northwestern Miller* in Chicago.

Now, that is the kind of propaganda that went on, preceding the action taken by the Minister of Trade and Commerce in regard to bringing this matter here. But let that go. I cannot prove that one was related to the other at all, but it is rather a significant coincidence that some of the supplementary evidence to justify taking this step has been brought down after the Bill was on the order paper, and the other matter occurred simultaneously with Mr. Short's joyride across the continent drawing attention to the depressed farmers of the south, after being burdened down with grasshoppers and drought, and then having to carry the northern farmers on their backs. The unfortunate part of it is that the southern farmer has nothing to market, and that is the reason why Garnet is going out in solid blocks.

And who are they going to refer this to? The Grain Standards Board. And when I talk of the Grain Standards Board I would like to remind the committee that I have been on that board for 25 years of my life, and I know pretty well its workings, and there are a lot of good men on it. But they have already passed judgment on this question in 1931—what the lawyers call *ex parte* evidence. The gentleman who was prepared to give evidence before was Dr. Newman, a member of this Board. He was notified of the meeting in 1931 in the usual way, and nothing was indicated that this particular question was to be brought up. After 25 years' experience on that Board I know that every time it had a special question before it the fact was always mentioned on my notice so that I would be sure to be there if I happened to be interested in that question. Dr. Newman got his notice to go to this meeting in 1931, but absolutely no reference was made to Garnet wheat. They met without Dr. Newman. Knowing he had evidence, they went along and pronounced themselves against Garnet and in favour of grading it separately.



Now, those are the facts. Dr. Newman will substantiate them when he gives his evidence. I am speaking largely from memory, but I know it just the same, and I know that is right. This is the Board which with evidence on only one side, and what they happened to know themselves, pronounced on this Garnet wheat question without hearing the evidence of the other side. Now, then, the same jury is there with one exception, the same Standards Board is there, and if my memory serves me aright—I will be subject to correction—this matter has been referred to them twice already. It was referred to the Grain Standards Board in 1932.

Mr. HAMILTON: That is correct. After Mr. Ramsay returned from the Old Country it was again sent to the Grain Standards Board.

Hon. Mr. MOTHERWELL: Then, in order to make the Grain Standards Board more representative, apparently two gentlemen whose names were mentioned here the other day, Mr. Canfield and Mr. Bennett, were put on the Standards Board recently—possibly since the last meeting of this committee on the subject, 1932.

Mr. HAMILTON: Just after that.

Hon. Mr. MOTHERWELL: Apparently that was to give the Garnet area representation. But what kind of representation did it give Garnet wheat? Mr. Canfield is a grower of Reward wheat and a member of the Seed Growers' Association and a competitor against Garnet, not a representative of Garnet. That gentleman is put on the Standards Board with the idea of giving a more representative and a fairer jury. Not satisfied with referring this question to the same court twice, the proposed Bill is to send it to the same jury a third time. Now, we have some legal men in this committee, and we are always glad to have legal men in the Agriculture Committee, and those gentlemen know that if you have an appeal from one court to another court you would not send it back to the same court with only additional evidence which is worse rather than better. What would you think of that practice? Yet that is what is proposed in this Bill. I might say that the Minister of Trade and Commerce has not thought it out very well. Now, Mr. Hamilton and I have been friends since boyhood. I played ball with him when he was in his knickerbockers. He is one of my personal friends. Indeed, some people are so unkind as to say that maybe I had something to do with his appointment. But let that go. I still feel kindly towards him, and I am not going to speak on any personal grounds. I would rather save him than criticize anything he has said. But that is what they did with the Standards Board—not the second time, but the third time.

Mr. HAMILTON: May I try to correct you on that. It is not proposed to refer to the western committee on Grain Standards the question as to whether Garnet wheat should be graded separately or not unless this committee should decide to do so. That is not the proposal in the Bill. It is proposed to refer to the committee the question of setting up grades, not as to whether Garnet wheat shall be graded separately or not but to decide whether there shall be one grade, two grades or three grades.

Hon. M. MOTHERWELL: Of what? Garnet?

Mr. HAMILTON: Yes, of Garnet; and what the specifications of these grades would be.

Hon. Mr. MOTHERWELL: That is surely splitting hairs. That is the court we have to deal with. Mr. Stevens says he is going to wash his hands of it altogether. He has when he sends it to the Standards Board.

Mr. LUCAS: Is it not for this committee to decide that point?

Hon. Mr. MOTHERWELL: Surely. This committee has to do with this Bill. If we say it goes through, of course it is this committee; but the question of the separate grading of Garnet wheat was before this committee before and

it was reported on before, but the report was never concurred in. I am merely reminding you that it lies in your hands whether this Bill goes through or not or whether the Grain Standards Board is made the tribunal that will decide the matter. I will tell you candidly what that looks like to me: sending a matter back to the third court for the third time with an addition to it makes it worse and less representative of the Garnet interests seems to me an outrageous proposal altogether. I have never heard of such a thing in all my born days. You have all heard the old saying about laying a charge against His Satanic Majesty and then holding the court in hades. This system is very much like it—giving back to the same court that has already decided twice on it. I am not discussing the merits or demerits of Garnet wheat this morning. That is not my business. I have another meeting that is quite as important to me as Garnet wheat; but I am questioning very seriously this method and protesting very strongly against referring this question for the third time to the same tribunal, only worse.

**Mr. HAMILTON:** May I read from the statement which I already read. In this case it is not a matter of what I might have said offhand, but I prepared a memorandum and I am reading from that memorandum. It says, "To carry out the representations of the western committee on Grain Standards to the committee on Agriculture and Colonization the present Bill amending the Canada Grain Act has been submitted." To carry out the recommendation of the western committee to the committee on agriculture and colonization this Bill has been submitted.

**Hon. Mr. MOTHERWELL:** Yes. The recommendation of this committee was never concurred in. It died on the table. It is of no more use than a dead chicken that was found dead on the roost next morning; it died on the roost; and the recommendation of this committee died on the roost, as dead as a doornail, and you want to resurrect it on this day; peradventure, it stinketh by this time. If we resurrect it we could restore it and put it through the House of Commons yet. No. Here is your recommendation, Mr. Hamilton. You read it yourself. It is dated the 8th of February, and the evidence is so unconvincing that it will make a laughing stock of this committee. It was bad enough before; it will be infinitely worse this time if you send it back to the Grain Standards Board for the third time after being made just a little worse—a less representative committee.

Now, that is what I submit to you in all fairness to the committee—not to the Liberals of this committee because that would be hopeless, there are so few of them, but to the Conservatives and every man in this committee no matter what he is politically. I appeal on the unfairness of this proposition of taking a tribunal of this kind. There are a lot of good men on it. I know a lot of them, but the man from the north is a Reward grower. I appeal to every man here not to put this committee for the third time in the position that you are going to do something that you cannot get through in the House of Commons. Let us do something that can be stood up to in the House of Commons and before the whole world, and not passed here and base some subsequent action on it, although the passing of it was never concurred in by the House of Commons and was never submitted in the House of Commons. That is my plea to you this morning. Later on we will deal with the Garnet question—the question of merits or demerits—but the procedure proposed by the Bill is as I described.

I had an interview with Mr. Stevens about a month ago, and I asked him: "Does that mean that you are referring this back to the Grain Standards Board?" He said, "Yes." I said, "Mr. Stevens, there is nobody on that Board representing the northern section of Saskatchewan, the north of the prairie prov-



inces." He said, "I will look into that." He took the matter up with the Board of Grain Commissioners and informed me about a week afterwards. He said, "There is a man from the north already on that board." I said, "That is all right; it will make the committee look a little fairer." I find that the man they put on is a Reward grower and not a Garnet wheat grower at all. If you make a decision on this and decide to go back to this tribunal, you certainly cannot defend it before the country, if that tribunal or jury—because that is what it would be—were subject to challenge. Just imagine if it were subject to challenge; not one single man would be permitted to sit on it. We have the same question presented a third time with the addition of only one man. Now, Mr. Chairman, I hope I have not started a controversy. I have been accused of working with the Conservatives rather than otherwise. I have tried to work with them.

Mr. MYERS: Will you allow me: as an Easterner I am not interested in wheat at all, but I am interested in the Agriculture of the country as a general subject, so I am only going to take a moment. Evidently there is a question as to whether Garnet wheat should be included in number 2. Now, you do not want to refer the question to the Grain Standards Board.

Hon. Mr. MOTHERWELL: I certainly do not.

Mr. MYERS: Then to what body do you want to send it.

Hon. Mr. MOTHERWELL: I want the government to take the responsibility, the way they do with anything else; and I want the government to do it just the way they did with all the other standard grades.

Mr. MYERS: You mean, this committee here.

Hon. Mr. MOTHERWELL: Right.

Mr. MYERS: I suggest that this is a matter for the western wheat growers themselves, and the western wheat growers in this committee. This committee has been working on this thing for three years now, let's get busy and get it settled.

Hon. Mr. MOTHERWELL: You are perfectly right, that is the crux of the thing. The real trouble is that there are two ministers dealing with Agriculture. Here is one on this side. I happen to be with Mr. Weir again as I was two years ago; as I was on the marketing bill. You have two heads in the Department of Agriculture, that is the trouble; the one head is leaning one way, and the other is going the other way. How are the rest of us to decide.

The CHAIRMAN: Order, now; one at a time, please.

Hon. Mr. MOTHERWELL: I must go. I have to thank you. Mr. Myers has touched upon a very very important question; he says, how can a committee composed largely of eastern members deal with a western problem when we are ourselves divided on it. The government has taken the responsibility for all the other big standard grades; why should they not with this.

Mr. VALLANCE: I think, in order that those who were not in the House prior to 1930 may know something about, when we revised the Grain Act last, I might recall that we sat for weeks and weeks on it. I think there were only two Eastern members on that committee. At that time the government did assume that responsibility. I am right with you, Mr. Motherwell; this is where these classes should be settled, not by the Grain Standards Board at all.

Hon. Mr. WEIR: There is a liberal caucus, I believe, this morning; and I will promise that I will not take over five minutes to say what I have to say, because I know members are anxious to get to their meeting. The question before us is this: I believe in what Mr. Myers said, that it might be advisable to have set up a sub-committee comprised of western members.

The question before us is this: does the presence of Garnet in it discriminate against No. 2 wheat? What test is available to us by which to decide

that? We have received letters from millers, and from our trade commissioners, and I am quite certain that we are all agreed that these people are conscientious in the statements they make. Well now, if there is no doubt about this matter, the big thing for us to do is to show Garnet growers indisputable evidence that there is no doubt. By what other way can we measure this discrimination? After all, I think the best test is the price which is paid for No. 1 and No. 2 wheat.

Some Hon. MEMBERS: Hear! Hear!

Hon. Mr. WEIR: No doubt this narrow spread—and I am going to put this on record—that the abnormal spread in Vancouver between No. 1 and No. 2 was due to the predominance of Garnet in No. 2. The spread in January at Fort William between No. 1 and No. 2 was 4·24 in 1932; in Vancouver it was 5·9. The growing test showed during that year 64 per cent in No. 2 Northern at Vancouver. I think our meetings here were in the spring of 1932, when we made the recommendation that was made in this committee, but was never approved of by the House. But what do we find later? In June of 1932 the spread at Fort William between No. 1 and No. 2 was 3·2 cents; at Vancouver it was only 3·1 cents. I shall put these on record, as I do not wish to take the time to read them all. We go on down and in each of these months from June to December the spread between No. 1 and No. 2 at Fort William was greater than the spread between No. 1 and No. 2 at Vancouver, where No. 2 contained more Garnet than it did at Fort William. The spread was so narrow at Vancouver that in the month of October it was just one cent a bushel at that point, while the spread between No. 1 and No. 2 at Fort William and Port Arthur was 1·8 cents.

	Winnipeg Prices Basis Fort William and Port Arthur			Vancouver Prices		
	No. 1 Northern	No. 2 Northern	Spread	No. 1 Northern	No. 2 Northern	Spread
	Per bush.	Per bush.	Per bush.	Per bush.	Per bush.	Per bush.
1932						
January.....	59·9	55·7	4·2	61·2	55·4	5·9
February.....	63·2	59·2	4·0	63·4	58·6	4·8
March.....	62·9	59·0	3·9	62·6	57·4	5·2
April.....	62·6	58·8	3·8	60·7	56·5	4·2
May.....	62·9	59·3	3·6	60·5	52·7	7·8
June.....	55·1	51·9	3·2	52·6	49·5	3·1
July.....	54·7	51·7	3·0	51·6	48·8	2·8
August.....	56·3	53·5	2·8	53·9	51·4	2·5
September.....	51·9	49·5	2·4	49·6	48·3	1·3
October.....	48·2	46·4	1·8	45·8	44·8	1·0
November.....	46·7	45·2	1·5	46·2	45·1	1·1
December.....	42·4	39·9	2·5	43·2	41·4	1·8
Average.....	55·6	52·5	3·1	54·3	50·8	3·5
1933						
January.....	44·2	42·0	2·2	45·3	43·8	1·5
February.....	45·6	43·9	1·7	45·9	44·6	1·3
March.....	49·2	47·3	1·9	49·1	47·0	2·1
April.....	53·6	51·9	1·7	52·4	50·0	2·4
May.....	63·3	62·0	1·3	61·4	59·5	1·9
June.....	66·8	65·3	1·5	64·8	63·0	1·8
July.....	83·4	81·0	2·4	82·2	79·5	2·7
August.....	73·4	71·3	2·1	71·6	68·6	3·0
September.....	67·2	65·1	2·1	64·9	62·5	2·4
October.....	60·5	57·8	2·7	57·3	54·0	3·3
November.....	63·7	60·9	2·8	61·7	57·6	4·1
December.....	62·7	57·3	5·4	59·8	55·3	4·5
Average.....	61·1	58·7	2·4	59·7	57·1	2·6

Hon. Mr. MOTHERWELL: Was that in 1932?

Hon. Mr. WEIR: Yes, this is in 1932. I am not saying for an instant that it cannot be explained, why there was a narrower spread at Vancouver even with a preponderance of Garnet than there was at Fort William; but if it can be explained, surely the committee is entitled to the explanation.

Some Hon. MEMBERS: Hear! Hear!

Hon. Mr. WEIR: Now, the second way in which we can test the discrimination is this: it is stated that millers are discriminating against our wheat on account of Garnet being in No. 2. How will they show their discrimination, besides the spread? It will be by their buying wheat from other exporting countries. And that will be shown by the extent to which they are willing to pay exporting countries a higher price, as compared to what they pay for Canadian wheat, and than they did before Garnet was in our Canadian wheat. I think that is also a fair statement. Now, I believe that the Board of Grain Commissioners should be in a position, in conjunction with the trade which sells our wheat, to state whether that is the case or not; that is, whether the millers are discriminating against our wheat to the extent that they are willing to go out and pay a higher price for other wheat than they did in the past.

There is another method by which we can test this: the millers state that they do not want our No. 2 wheat; our own millers, and some millers of the United Kingdom; because of the Garnet in it. Can we find this out exactly, by getting sworn statements from the millers and from the trade as to just how much No. 2 wheat they are buying now in comparison with what they did buy.

Hon. Mr. MOTHERWELL: Hear! Hear!

Hon. Mr. WEIR: I am making this statement because all we want is the facts before us to enable us to decide whether there is discrimination against it or not.

I have another note: can the grain commissioners not tell us the complaints against our wheat during the last year; are there any complaints against No. 1—the point is raised, and the information seeps through to the farmers. My understanding was that of the 12 or 15 objections raised before the Western Grain Standards Board, all were against our No. 1 being too starchy in its kernels; and if that is true, that will account for the narrower spread between No. 1 and No. 2.

The next point I want to make, and I am through, is this: As I stated, we should have this definite information: because I believe that dollars and cents are the things that really tell with reference to wheat. Now, I have read a statement this morning by Dr. Newton, of the Research Council; and I think from the nature of his statement that he must have given it serious consideration, and he should be asked to come here and give us the benefit of what he has learned. Here is his statement, made in Winnipeg before the Board of Trade no later than April 6th of this year:

And the wheat that is still grown in the North should consist of good quality variety, like Reward, and not of the fatally attractive, sadly deceptive Garnet.

Now, that is a very strong statement; and if it is a true statement it is only fair to the farmers in the north of Saskatchewan and Alberta to know on what definite finite evidence that is based.

I would suggest that this committee meet in a week or ten days from now, giving the Board of Grain Commissioners ample opportunity to provide answers to these difficulties that confront us; and perhaps at that time we could decide, or today if it is in your judgment, whether a sub-committee should be set up of western members.



Mr. DUPUIS: We are all interested in the remark made by the ex-minister of Agriculture and the present minister of Agriculture. As an eastern member I am very much interested in these questions, but my interest is rather academic than practical. And moreover I believe that this committee has so many questions of general interest to be studied that it would be preferable that this question of Garnet wheat be referred to a sub-committee. I beg to move, seconded by Mr. Smith: that a sub-committee, to be composed of all the members of the three western central provinces be appointed to study this question and report back to this committee upon it.

Mr. MYERS: Mr. Chairman, before the motion is put to the committee I believe I have a better idea than that. I believe, as the minister has stated, that the real factor which determines the issue in a case like this is dollars and cents. In view of the price spreads which the minister has given us I would feel like leaving this question exactly where it is for another year at least, and then we would have a chance to see how the dollars and cents side of it works out.

Mr. TUMMON: Mr. Chairman, being one of the Eastern members I do not pretend to know a great deal about the wheat situation. There are a few things that I cannot just reconcile in my mind. In the first place, take for example the spread. I can perhaps understand the situation where the millers, having a certain amount of No. 1—probably there would be more No. 1 than there would be of No. 2—but they would have to have a certain amount of No. 2 to mix with No. 1. The result might easily be that the spread between No. 1 and No. 2, would be limited to a very small amount; on the other hand there is another question that has been going through my mind, and that is, if Garnet wheat is as good as those who claim it is, what fear should there be to grading it. As far as I am concerned I want to get the facts all together and I want to vote intelligently, and I cannot vote intelligently until I hear some of the evidence. And I think that, even like Mr. Vallance, I do not believe that the Minister should come here and take the stand that you should do this and you should do that, after hearing the evidence. My opinion is that we should follow the suggestion of the Minister of Agriculture and through calling witnesses here—all the other committees are calling witnesses, and it costs money—this is just as important a committee as any committee of the House; let us do likewise. Let us get the facts and then be in a position to settle this question one way or the other.

Mr. CARMICHAEL: I think we are forgetting that two years ago we put in day after day in this very committee listening to evidence in connection with this very subject. I was just looking in my drawer up there this morning, and I still have a stack of the minutes of evidence given before this agricultural committee on the subject of the grading of Garnet wheat. Well now, two years afterwards do we need to go through the same process again?

Mr. DAVIES: You might find part of that evidence so out of date as to be misleading.

Mr. CARMICHAEL: I do not know whether that evidence is wrong or not. Personally, I do not see that there is anything to be gained by referring back to the procedure we took three years ago. Nor, Mr. Chairman, do I say that it is a proper procedure to refer this to a western committee. While the western committee might decide it on its merits as they see the question, I think the members of Eastern Canada are interested in this question too. It is not a matter of the grower of Marquis getting a little more for his No. 2 or a grower of Garnet getting a little more for his No. 2; it is a matter of protecting the reputation of Canada in world markets, or the wheat that she exports, in face of the fact that 14 per cent of the production is Garnet wheat and 86 per cent of the production is Marquis, Reward, Renfrew, or some other variety. Accord-

ing to the statements that have been made to us here, the last time we met and to-day, we are prejudicing our chance in the world market by allowing to continue what we have allowed for the past two years. I have not got any evidence here in regard to these price spreads between Fort William and Vancouver on No. 2 Northern, but I would like to point this out: during the last two years the price of No. 1 Hard has increased over the price of No. 1 Northern, all the way from 2 to 5 and 6 cents a bushel. This morning the spread between No. 1 Hard and No. 2 Northern is 4 cents a bushel. Now, a matter of some three or four years ago, No. 1 Hard and No. 1 Northern were the same price. Now, I cannot give you any technical evidence in regard to that, but there is a lurking suspicion in my mind that the present unsatisfactory condition of No. 2 Northern has something to do with that and we have displaced the No. 1 Hard, which is now equivalent to what it used to be, No. 1 Northern, and we have now a No. 1 Northern which is equivalent to what used to be No. 2.

Mr. FRASER: Might I point out that there is no Garnet in No. 1 Northern; your Garnet would not come into that picture.

Mr. CARMICHAEL: Perhaps our No. 1 Hard and our No. 1 Northern are developing into the grade that used to be No. 2 Hard and No. 1 Northern.

Mr. VALLANCE: Are you saying that that question is correct, Mr. Fraser?

Mr. FRASER: I would say that that was not a fact.

The CHAIRMAN: Has Mr. Carmichael finished his statement?

Mr. CARMICHAEL: I was just raising that question, that is something which has developed within the last two or three years; and the reason that we put through amendments to the Canada Grain Act here during the last few years was because there was no spread between No. 1 Hard and No. 1 Northern, and some of us thought we ought to have a different grade. The spread this morning is 4 cents. That is something worth remembering. It is up to this committee to settle the question, and we should settle it at this session of parliament; and I do not see any virtue in calling witnesses before us to state what we had two years ago.

The CHAIRMAN: Before the next member speaks, may I just say that there are a number of copies of the Minutes of Evidence taken two years ago on the table here—the first five hearings, with the evidence submitted by Mr. Ramsay, the then Commissioner; Dr. Newman, of the Department of Agriculture; Dr. Tory, of the National Research Council; Dr. Newton, of the University of Alberta; and Mr. Fraser. These copies are available for members of the Committee who may desire to look into them. It seems to me that it would be wise, in any case, not to go over the evidence of what was submitted before again, and to confine our activities to new evidence as to what has developed between the time of the last hearing and the present.

Mr. VALLANCE: Mr. Fraser, I think, wants to make a statement now.

Mr. FRASER: That is, with respect to No. 1 Hard being of the same weight as our No. 1 Northern is today. Our No. 1 Hard today is considerably better than our No. 1 Northern has ever been. The reason why we have had No. 1 wheat during the last three or four years is on account, I believe, of the dry season, where our wheat has grown harder and stronger and redder than it was during the season when they had a lot of rain. Our No. 1 Hard today is getting the same reception on world markets that it has always had in previous years. Our No. 1 Northern today I consider is still No. 1 Northern.

Mr. VALLANCE: It is still statutory?

Mr. FRASER: Yes.

Hon. Mr. WEIR: But it will be influenced by the other in producing the same kind of wheat, on account of the drought.

Mr. FRASER: I might say this; in connection with our No. 1 Northern: that we have not been excluding Garnet strictly from our No. 1 Northern. At the present time we will allow from 3 to 3½ per cent in our No. 1 Northern as it comes along; so our No. 1 Northern is not strictly free from Garnet. We did that because our No. 2 Northern might carry 100 per cent. I do not know that this information should be given out to the world's markets, because it would appear to me from the evidence we have had that they believe our No. 1 Northern is free from Garnet.

Mr. DONNELLY: I would like to ask Mr. Fraser one question: can he tell the committee why it is—we hear it said that about 14 per cent of the grain grown in Canada is Garnet wheat—before this Committee it is said that in the No. 2 Northern that goes out by the Pacific Coast, contains up to 80 per cent of Garnet, and that going out by way of the head of the Lakes has somewhere about 50 to 60 per cent; how can that be if we are only growing about 14 per cent Garnet in Western Canada.

Mr. FRASER: Probably 90 to 95 per cent of the Garnet graded is going in to No. 2 Northern, into one grade; it is not spread over all the grade, it is only going into one grade; which will probably bring it up to an average of 35 to 40 per cent. Naturally with most of it going out by way of Vancouver, the percentage is high there and lower at the head of the Lakes.

Mr. DONNELLY: Would that mean also that Garnet has a tendency to be a higher grade all the time—with very little in the lower grade?

Mr. FRASER: Yes, it would have that tendency.

The CHAIRMAN: I would like to call to your attention the fact that there is a motion before the committee. I think perhaps it would be wiser for us to dispose of the motion before asking further technical questions.

Mr. DAVIES: I would like to concur in what the Minister of Agriculture has said, and the motion before the committee has my approval. I am afraid I disagree with what Mr. Carmichael has said. I do not for a moment desire to rehash again before this committee all the evidence that went to court in 1932. All those who are familiar with the report made in 1932 will recollect that one of the most cogent reasons advanced at that time as to why Garnet should be graded separately was because of the spread which developed a No. 2 Northern out of Vancouver. Now, we find that the position since that time has been reversed, and I agree with the Minister of Agriculture that we should know why it is that that reason was advanced at that time when it is now the other way. As far as I am concerned personally, I do not think that there is any other question before those whom I represent that is more important than the question which is now before the committee. I do not think it would be inaccurate to say that all the wheat grown north of the North Saskatchewan and beyond a radius of 25 miles from Edmonton—as far as Athabaska constituency is concerned, Garnet is grown very extensively; in many districts it is the exclusive grain. I know for a fact that north of the North Saskatchewan there are countless districts which grow nothing else than Garnet. Furthermore, I think I should point out that the Garnet growers of Northern Alberta do not feel that they have had good representation on the grain standards committee. Mention was made of the fact that Mr. George Bennett was a member of that committee. I do not know whether it is correct or not, but it was suggested in this committee at the last meeting that Mr. Bennett himself grows Reward; but he does not come from a Garnet area. Furthermore, he is, if I remember correctly, a director of the Alberta Wheat Pool, which itself is on record as being, along with the other two pools, in favor of separate grading of Garnet. To that extent Mr. Bennett is prejudiced in being able to act fairly for Garnet



growers. Who would think of nominating a member of a Toronto conservative executive to be president of a free trade association? It is an essentially similar parallel, to about that extent only would Mr. George Bennett be capable of acting on behalf of the Garnet growers.

Now, personally, I do not for a moment desire to obstruct this committee. Furthermore, I do not think that the Garnet growers insist on Garnet being graded with No. 2 Northern; but I think they are entitled to insist that very clear evidence should be advanced as to why that wheat should be graded separately. After all, the farmers of Northern Alberta are growing Garnet to-day for no other reason than that the government told them to grow it. There is an area in Northern Alberta where the government went in and distributed Garnet wheat fifteen years ago. The government told them it was good wheat, and I respectfully suggest that nothing should be done to discriminate against it, or to put it in a position where it makes it impossible for them to grow it, unless there is very, very clear evidence to show that that should be done. And I do think, particularly in view of the statement made by the Minister this morning, that there is not sufficient evidence in that direction.

Mr. PERLEY: I have had some experience both in growing and marketing Garnet wheat, and in buying it as an elevator operator for the last fifteen or twenty years—ever since Garnet has been on the market. Now, I cannot see any useful purpose to be served in rehashing this thing again. We had very exhaustive evidence here two years ago in every line. I was on the sub-committee that had to do with the producing of evidence and the preparation of the report, and the evidence went to show very conclusively that it should have been a separate grade. I believed at that time, and I believe the report contemplated, that after two years it would be again considered; and that would give those growing Garnet wheat an opportunity to change to some other variety. I think the growers of Garnet wheat have been changing and taking up Reward; it is perhaps equally early, and as good a wheat. I think the evidence that has been produced here on the last day we met is sufficient further evidence that we should this year take the step that it is proposed to take by this bill.

With regard to spreads: I have had some experience in buying grain. There is nothing to these spreads, because that is a condition that varies from year to year, depending on the quality of the crop. We have had conditions of wheat in the west where the spread between the No. 1 and the No. 4 would narrow up, owing to the quality of crop. I say, from year to year the spreads vary from that standard as to quality.

Hon. Mr. WEIR: Might I interject, Mr. Perley, to point out that the spread to which I had reference related to the 1932 crop. It is not a difference from year to year.

Mr. PERLEY: You have taken the 1931-32 crop; you might have a condition altogether different.

Hon. Mr. WEIR: From what?

Mr. PERLEY: Well, the spreads would be much smaller one year than another. You might have a year with a very high percentage of say No. 1 wheat and there would be a demand for a No. 2 wheat for mixing purposes and so forth. The mills would require it, therefore the spread would narrow up between No. 1 and No. 2 Northern. Or you may have the opposite situation where you would have a great quantity of No. 2 wheat, your wheat crop would only go into No. 2 and there would be a great demand for No. 1, which would work out. I think Mr. Fraser can verify my statement, that from year to year the spreads vary on account of the quality of the crop.

The CHAIRMAN: Gentlemen, I suggest that we should dispose of this motion which is before the committee. Mr. Dupuis has moved, seconded by Mr. Smith, that

a sub-committee composed of western members of this committee be appointed to deal with the question and report back. Now, might I point out to the Committee, of course, that any report which is made by the sub-committee will have to be adopted by the main committee before the report can be made to the House; so that every member in the committee will be responsible to a certain extent, and have their share of responsibility in supporting the action taken. I am going to leave it at that, just to show you what the position is; and it is for the committee to decide.

Mr. TUMMON: Mr. Chairman, when I made the suggestion that I did, I had no idea of going back and rehashing the evidence given two years ago. My idea was that we should bring that evidence up to date. The evidence that was given two years ago in a great many cases, may be completely out of date to-day. I really think that the question as to whether or not evidence is to be taken, to a limited extent, should be decided before the motion that is now before the committee, and should be voted on. If the evidence is going to be taken, I would feel disposed to having the evidence given before the entire agriculture committee.

Mr. BOYES: As a member from eastern Canada, and one possibly not so very much interested in Garnet wheat—not to any extent other than the reputation of the wheat as a whole for the Dominion of Canada—I feel that in having this referred to a sub-committee possibly will not expedite matters very much. As it has to come back to this committee anyway, it may be wise that we continue as we are, and take evidence such as our Chairman has suggested, that is new evidence to what we took two years ago; not have that repeated, but call new evidence, and take it before this committee as a whole as we have it at the present time, and not have a sub-committee.

Mr. LOUCKS: I don't want to take much time of the committee. I agree with the former speaker. I don't believe we should split up the committee. I am from western Canada, and I think that we should hear the evidence that is submitted here as to the merits of this wheat. I think we pretty well agree, because the responsibility has to come back to the whole committee, after all, and I think it would be a waste of time to split it up.

The CHAIRMAN: Are you ready for the motion, gentlemen? You have heard the motion which is that a sub-committee of western members be appointed to deal with this question. All in favour? Contrary? I declare the motion lost.

I think the next thing to do would be to decide whether you want witnesses; and if so, it would be wise, possibly, to appoint a sub-committee to deal with the question of witnesses.

Mr. CARMICHAEL: Just on that question, briefly—I have no objection to hearing anything additional of developments in the past two years, but it would be necessary for us to know very definitely what we heard two years ago, and then decide what new points are going to be brought out that will be helpful to us. I think if you delve into that, you will find there is very little, except on those price spreads that Mr. Weir (*Melfort*) has mentioned. I think you will find very little that we didn't get two years ago that will be helpful to us.

The CHAIRMAN: I am afraid it is hopeless to deal with that question as a whole committee. Don't you think a sub-committee should look into that, and perhaps this committee instruct them not to ask for evidence to be repeated? I am only suggesting that in an attempt to facilitate the work of the committee.

Mr. CARMICHAEL: I think, Mr. Chairman, we would be proceeding in a more orderly manner if you had a sub-committee decide on what points evidence should be secured before there is any sub-committee appointed to decide on calling any witnesses. If we decide to call any witnesses, we will just start following the same trail as we did two years ago. I would make a motion that

the Chairman appoint a sub-committee to decide what points of evidence should now be obtained which we did not have two years ago.

Mr. VALLANCE: On that point, might I suggest to you, Mr. Chairman, if you are going to do that, there is only one point. That point is as to whether this wheat should be segregated and graded by itself or not. That is the point. As to how you are going to get the information, to arrive at the conclusion as to whether it should or not, is the next point. But that is the question at issue, Mr. Chairman.

Mr. SWANSTON: Who are in a better position to decide that question than the western members?

Mr. VALLANCE: It is not for me to say; but I know that when we were revising the Grain Act—and I leave it to the two eastern members who sat in; we were very pleased to have them sit in—the whole responsibility did fall upon the western members, and I think we did a good job of the revision of the Grain Act. While it is very nice to have the eastern members sit in here with us and discuss this question—it is an education to them—I suggest that now they are going to have it before this entire committee, that they see they attend it; and let us sit a little more regularly than we have been doing. It is possible for the western members to sit every other day.

Mr. DAVIES: I will second Mr. Carmichael's motion.

The CHAIRMAN: You have heard Mr. Carmichael's motion, is there any discussion? The motion was that a committee be appointed of say five, Mr. Carmichael, would you say?

Mr. CARMICHAEL: Three or five.

The CHAIRMAN: That a committee of three or five be appointed to decide upon the additional evidence to be submitted to this committee.

Mr. CARMICHAEL: Additional evidence which will not cover the field which was covered two years ago.

Mr. DAVIES: I am not willing to second that. That was not the original motion.

Mr. CARMICHAEL: Yes. The point I wanted to make was that there is no need of covering again, in the taking of evidence, what was covered here two years ago. If there is additional evidence to be brought before the committee which has developed within the past two years, certainly we should take it. The point I had in mind was that a committee of three or five members could decide what points should be brought before this committee which would give us information we have not now got.

Mr. VALLANCE: I think anyone who is familiar with the question knows that the condition is the same as it was two years ago. This evidence you have now, that you took two years ago, is enough for you to base your conclusions on right now. There is nothing that you can bring in now dealing with Garnet wheat that you didn't get two years ago. The farmer is just in the same position.

Mr. PERLEY: Other than the matter of spreads. I would suggest this: We have one of the largest exporters of grain from western Canada sitting right here in this room to-day, Mr. Sidney Smith of Winnipeg. I would move that he be called, may be not to-day, but if you are calling other witnesses with respect to spreads, I move that he be called.

Mr. MULLINS: Mr. Chairman, I agree with the last speaker. There are two or three practical men here who are connected with the grain business in Winnipeg, to my own knowledge, and I don't see why you can't get all the information that is necessary to decide the question that you have before the committee now. They are traders in grain, and they know; they are honest



and conscientious, and I know they would give you all the advice that would be necessary.

Mr. DAVIES: Mr. Chairman, I rise to a point of order. There is already a motion before the committee which we have not dealt with.

The CHAIRMAN: I was trying to get that motion in shape. Mr. Carmichael, I have drafted a motion hurriedly which will, perhaps, meet with your approval: Moved by Mr. Carmichael that a sub-committee of five members of this committee be appointed to decide upon the evidence to be asked for, having regard to the evidence given at the former investigation into this subject in 1932 by this committee.

Mr. GOBEL: Will that dispose of the business to-day, Mr. Chairman?

The CHAIRMAN: Well, I am not sure about that. Is that sufficiently definite, Mr. Carmichael?

Mr. CARMICHAEL: Well, it is not as definite as I made it, but if it is understood by the committee that is what is desired, it is quite all right. I have in mind not only the evidence that was taken, but with a view to avoiding duplication.

The CHAIRMAN: I wish you would draft that yourself.

Mr. CARMICHAEL: There seems to be a feeling on the part of some members of the committee that we should hear evidence from the western men who are here now. If that is satisfactory to the committee, to hear the evidence from these men and go no farther in the taking of evidence, there is no object in putting this motion.

The CHAIRMAN: Are those gentlemen prepared to give evidence to-day, without any notice? I am perfectly agreeable.

Mr. GARLAND: The inference in Mr. Carmichael's remarks is to hear the grain experts of the grain trade, and then close the evidence.

Some Hon. MEMBERS: No.

Mr. GARLAND: I thought he suggested that if that is the only evidence taken, all right. I thought his point was made in an endeavour to try and break it off. I want to say if we are going to hear the grain trade, I am going to protest that this committee has a right to hear the evidence of the producers who are directly interested in growing Garnet wheat themselves.

Mr. LOUCKS: The whole thing we are concerned about has been repeated. We want to know whether this Garnet wheat is detrimental to the export of wheat. I think we have had evidence already to convince us that it is. On top of that, I don't for a minute feel like excluding those who have had experience, and those who have shipped, some of those from Winnipeg, who are here at this time and might give us evidence. I think this should be settled one way or another at this session right now. Two years ago we came here, and we had evidence then that convinced me that it was a detriment. I believe that the time is ripe, that we should do something in this session. It has been mentioned that if Garnet wheat cannot stand on its own merit, there must be something wrong with it; and if it can, we want to see the growers in the northern part have it. I am in between. I have got Garnet wheat in my own constituency. But at the same time if it is going to be, for instance, as evidence has been brought down here, detrimental in foreign imports, then I think it is time we have got to take steps, because we must pay attention to importers, those that want this wheat. I don't see why we should take time now as the session is coming to a close, to take evidence from all over western Canada. As far as that is concerned, I don't think we are going to work any hardship at all on the northern part of Saskatchewan or Alberta. From the information I am getting Reward wheat can well take the place of this Garnet wheat. There

is no objection at all. From any evidence we have, Reward is a favourable wheat in any place in Europe. Two years ago warning was given. We have had two years. The Garnet wheat growers have had two years, and surely they should begin now to put themselves in a position whereby they may possibly adopt this Reward wheat instead of Garnet. I would like to see this thing brought to a head.

Hon. Mr. WEIR (*Melfort*): There is a point there that Mr. Loucks has mentioned, that there must be something wrong about Garnet wheat if it is afraid to stand on its own. There is just one point there. Garnet wheat may not in any way be detrimental to No. 2. It may be just as good wheat. What would be the effect of segregating it, as a separate wheat, in the minds of people that have been buying it for some time? I feel this way, that this sub-committee should get seriously to work and decide what points we want cleared up, and clear them up from every side; and notify witnesses before they come what information we want them to bring. I feel we should do this so that we can give the farmers indisputable reasons why we should take the steps we take, why we do put Garnet wheat in a separate grade; or if we cannot, then allow it is to continue. I do think, when thousands of farmers are affected to the extent that they will be affected, that the least we can do is for the sub-committee to seriously investigate the evidence we do need, and notify the people that we summon as to the evidence we want them to bring; and then decide it.

Mr. CARMICHAEL: With regard to this motion I had in mind, possibly it would still be acceptable that a sub-committee of five members be appointed to decide what additional points of evidence should be brought before this committee, which were not given us two years ago.

The CHAIRMAN: Is that satisfactory? Who is your seconder?

Mr. DAVIES: I was the seconder. It is quite satisfactory to me as long as it is understood that would not exclude the evidence that follows that evidence given before, on the spreads.

The CHAIRMAN: That would be new evidence. Are you ready for the motion?

Mr. TUMMON: Does the motion mean, if carried, that the sub-committee, after they have decided on them, go on and summon witnesses? Or do they report back to the committee?

The CHAIRMAN: If you don't mind, we will settle this motion first. Are you ready for the motion, gentlemen?

Mr. TUMMON: I think my question should be settled before the motion is put. I asked if the motion that Mr. Carmichael has made would mean that that sub-committee would first decide on the points, and then report back to this committee for adoption.

Mr. CARMICHAEL: Yes.

Mr. TUMMON: That is all right.

The CHAIRMAN: I think that is understood, then. All in favour of the motion, please signify.

Carried.

Then I suggest the names of Mr. Carmichael, Mr. Loucks, Mr. Perley, Mr. Vallance and Mr. Weir (*Melfort*). Are those names satisfactory? I was thinking that perhaps a little larger representation might be better on that committee, if they are to decide on the witnesses.

Mr. VALLANCE: Might I make a suggestion? You have three Saskatchewan men. I would suggest putting an Alberta man in my place. It would be quite agreeable to have Percy Davies.

Mr. CARMICHAEL: I would suggest having Mr. Davies on that committee.

Mr. VALLANCE: I would suggest that, with the permission of the committee.

Mr. PERLEY: It looks a little one-sided. I will drop out, and leave Mr. Vallance, and you can put Mr. Davies on.

Mr. VALLANCE: We have four from Saskatchewan. I thank Mr. Perley very much. I think we should let Mr. Loucks and the minister stay, and appoint one from Manitoba.

The CHAIRMAN: Where is Mr. Motherwell?

Hon. Mr. WEIR (Melfort): I would suggest adding two more, Mr. Davies and Mr. Motherwell.

Mr. CHAIRMAN: Would that be satisfactory, if we had two more and make it seven?

Carried.

Here are the members then, as I have them: Mr. Carmichael, Mr. Davies, Mr. Motherwell, Mr. Loucks, Mr. Perley and Mr. Weir (Melfort) and Mr. Vallance. I take it, in any case, that the two provinces of Saskatchewan and Alberta are the two that are vitally interested.

Mr. VALLANCE: A question, Mr. Chairman: I suppose the first named is the convener of the committee?

The CHAIRMAN: Yes.

Mr. CARMICHAEL: I would suggest that the Minister of Agriculture be the convener.

Hon. Mr. WEIR: I would suggest the first named.

The CHAIRMAN: I think the committee had better get together and elect a chairman.

Mr. MULLINS: Have you anyone there from Manitoba?

The CHAIRMAN: I think not.

Mr. MULLINS: There is some Garnet grown in Manitoba. I would suggest the name of Mr. Beaubier be put on.

Mr. BEAUBIER: I am not on the committee.

Mr. SWANSTON: I would suggest you have four Garnet men on there, and three Marquis; and that you had better put an independent man on from the other provinces.

Hon. Mr. WEIR: Who are the Garnet men?

The CHAIRMAN: Would it be satisfactory to put Mr. Weir (Macdonald) from Manitoba on the committee?

Mr. VALLANCE: It is suggested to me that if you enlarge it much more, they will all be on it.

The CHAIRMAN: Well, there being no further business, we will adjourn, to meet at the call of the chairman, when the sub-committee is ready to report.

The committee adjourned at 11.50 a.m., to meet at the call of the chair.











SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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FRIDAY, MAY 18, 1934

No. 5

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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WITNESSES:

Dr. L. H. Newman, Dominion Cerealists.

Mr. Sidney G. Smith, President of the Reliance Grain Company, Winnipeg.



## MINUTES OF PROCEEDINGS

FRIDAY, May 18, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon.

Mr. Senn, the Chairman, presiding.

*Members present:* Messieurs Barber, Bertrand, Blair, Bowen, Boyes, Brown, Carmichael, Coote, Davies, Donnelly, Dupuis, Gobeil, Golding, Loucks, Lucas, Motherwell, Mullins, Myers, Perley (*Qu'Appelle*), Pickel, Senn, Shaver, Simpson (*Simcoe North*), Smith (*Victoria Carlton*), Spotton, Sproule, Stewart (*Lethbridge*), Stirling, Totzke, Vallance, Weese, Weir (*Macdonald*), and Hon. Mr. Weir, Minister of Agriculture—29.

The Committee proceeded to the consideration of Bill No. 53, An Act to Amend the Canada Grain Act.

Dr. L. H. Newman, Dominion Cerealists, was called and examined on the subject matter of the proposed Amendments.

Mr. Sidney G. Smith, President of the Reliance Grain Coy., Winnipeg, was also called and examined on the Bill.

The subcommittee appointed at a previous meeting for the purpose of determining the points of evidence to be heard in relation to Bill No. 53, presented their report and on the Motion of,—

Mr. Coote, it was *Resolved*, that the subcommittees report be adopted and printed in the Minutes of Evidence.

The Committee decided to hear evidence on Tuesday next from Dr. T. W. Grindley, Chief of the Agricultural Statistics Branch, National Bureau of Research, and the representative of the Co-operative Wholesale Society, Montreal.

The Committee then adjourned until Tuesday next, at 11 a.m.

WALTER HILL,  
*Clerk of the Committee.*





## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429.

May 18, 1934.

The select standing committee on agriculture met at 11 o'clock, Mr. Senn presiding.

The CHAIRMAN: Order, gentlemen. We will proceed immediately. When our last meeting adjourned it was decided to meet at the call of the chair following a report of the sub-committee which was appointed to deal with the question of witnesses. I will ask Mr. Carmichael to make a statement regarding the action which the sub-committee took.

Mr. CARMICHAEL: Mr. Chairman, I have prepared a statement and I have had copies made for the benefit of the members of the committee if they want them now or later. Some of the members may wish to check up on this list. The statement is as follows:—

### MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE.

The Sub-Committee met on Thursday, May 17, to decide on what additional points of evidence should be brought before this Committee in connection with the proposed separate grading of Garnet wheat, which were not given us two years ago. All the members were present. There also present Mr. Hamilton, of the Board of Grain Commissioners; Mr. Fraser, Chief Inspector, and Dr. L. H. Newman, Dominion Cerealists. The following suggestions were made by the Committee upon which additional evidence might be taken:

- (1) The kinds of wheat, with quantity and grade, that are used by our millers in their grinding mixture.
- (2) Quantities of No. 1 and No. 2 Nor. wheat purchased by our millers over a period of the last three or four years.
- (3) How does the quantity of No. 2 Nor. compare with the quantity of other grades in our carryover during each of the last four years.
- (4) The Canadian price of No. 2 Nor. compared with the Argentine and Australian price for similar grade for each of the past four years.
- (5) The spread in price between No. 1 Nor. and No. 2 Nor. in Vancouver as compared with the Fort William price, and possible reasons.
- (6) Result of growing tests of samples of wheat, especially from Pacific ports and also from Atlantic ports.
- (7) Relative yields of Reward, Marquis and Garnet wheats at different points.
- (8) Improvement of the quality and pureness of variety of Marquis and the possible displacement of Garnet by other suitable varieties.

It was thought by your Committee that Nos. 1 and 2 might be answered by a representative of the Millers Association; Nos. 3 and 4 by Dr. W. T. Grindley; No. 5 by Mr. Sidney T. Smith of Winnipeg, and Nos. 6, 7 and 8 by Dr. Newman.

While your Committee was not instructed to make suggestions as to who should be called to give additional evidence, they considered it advisable to recommend to you the calling of the following as witnesses: Dr. L. H. Newman, Dominion Cerealists; Dr. W. T. Grindley, Chief of Agricultural Statistics Branch; Dr. H. M. Tory, President of the Research Council, to report more particularly on the storage qualities of Garnet flour; Mr. Sidney T. Smith, Winnipeg, Man., as a representative of the exporters; the President of the Saskatchewan Wheat

Pool and the President of the Alberta Wheat Pool as representatives of the producers of wheat; Mr. John B. Fisher, Scottish Co-operative Wholesale Society, Winnipeg, Man., and a representative of English Co-operative Societies, Montreal, both of these latter gentlemen to represent the importers; and a representative of the Millers Association.

All of which is respectfully submitted.

A. M. CARMICHAEL.

The CHAIRMAN: Gentlemen, you have heard the report of the sub-committee. No doubt it has been quite thoroughly considered. Is it your wish to adopt the report so that we may proceed with the work of the committee?

Carried.

Now, gentlemen, we have with us this morning—unless there is some other work that some other member wishes to bring up—Mr. Newman, Dominion Cerealists, who is prepared to make a statement to the committee. Is it your wish that we should hear Mr. Newman.

Mr. L. H. NEWMAN, called.

I would like to ask the committee to allow Mr. Newman and the other witness as well, as far as possible, to make their statements first. Most of you will be able to take notes, and if there are questions you wish to ask they can be reserved until after the witness has finished and then you will be at liberty to ask any questions you wish. Mr. Newman tells me that he will take only ten or fifteen minutes with his main brief.

The WITNESS: Mr. Chairman and gentlemen, in the evidence which I submitted two years ago, and which will be found in volume 2, page 37, I referred to the percentage of Garnet wheat found in 1 Northern and 2 Northern ex Vancouver and ex Atlantic ports. If you will refer to that page you will find that we recorded there an average of 61.23 per cent Garnet in 2 Northern out of Vancouver and 37.36 per cent out of Atlantic ports. Your sub-committee has asked me to present to you the data we have obtained since that date. I think most of you are aware that we co-operate very closely with the Board of Grain Commissioners which collects samples from cargoes and sends them to us for growing tests in order that information may be obtained which will not be questioned as to the actual percentages of the different varieties found, because there are some who believe it is difficult to say definitely what this kernel of wheat is and what that kernel of wheat is; so these growing tests are conducted, and I will give you as briefly as I can the results of the tests. I do not know whether you can follow these charts which I have placed on the wall very clearly or not, but if so, you will note first of all, that we continue to ship out of Vancouver a much higher average percentage of Garnet in 2 Northern than we do out of Atlantic ports. This chart deals with the crop of 1932 only, but, singular as it may seem, the crops of 1930, 1931 and 1932 were very similar. Thus the average per cent of Garnet as I have shown, in the 2 northern out of Vancouver in the crop year of 1930 was 61.23 per cent, while the crop of 1931 contained 64.4 per cent and the crop of 1932 65 per cent. Each of these points on the charts indicates the percentage of Garnet found in one cargo. There are 50 points on each of the two charts, with the names of the boats written across the bottom. Here is a boat (indicating), the *Rushpool*, containing the lowest per cent of Garnet found in any cargo out of Vancouver in the crop of 1932 namely 44.6. The highest percentage of Garnet, namely 86.5, was found, you will note, in the boat *Cressington Court*.

While there are fluctuations in the percentages of Garnet in the cargoes of 2 Northern leaving Vancouver these are not nearly so great as they were out of Atlantic points, and this, I think, may be a point of some significance. This

situation might possibly be explained in part at least by the fact that the cargoes from Fort William are transhipped further east into ocean-going vessels. I imagine however that with this variation in the percentages of Garnet in 2 Northern ex Fort William you would be altogether likely to find pronounced spreads in the cargoes as they arrive overseas. I may be wrong, but I would hardly imagine that this line (indicating) would smoothen out a great deal. As a matter of fact, the samples collected from the 1930 crop were collected from cargoes arriving at Liverpool and there we found about the same fluctuations as previously explained. Incidentally, we find about the same fluctuations in 3 Northern—that is the fluctuations in 3 Northern out of Atlantic ports in respect of Garnet content, are much more pronounced than are the 3 Northern fluctuations out of Pacific ports.

What lesson can we take from these charts? We have been told that there has been practically no complaints regarding our 2 Northern wheat leaving Atlantic ports, and yet we find actually that we have over 60 per cent of Garnet in some cargoes with an average of 34 per cent. There is a much lower average, it is true, than that found in the Vancouver shipments but nevertheless we ship an appreciable amount in some cargoes and these show great fluctuations. Is it safe to conclude from this that the Old Country buyer is prepared to accept without complaint this 2 Northern wheat from Atlantic ports which contains up to 60 per cent of Garnet? If we are not prepared to do this we must conclude that he is not objecting very seriously to these fluctuations.

As mentioned before, our data covers the three crop years, 1930, 1931 and 1932. The samples submitted by Mr. J. D. Fraser, Chief Grain Inspector, from the 1933 crop are now in the ground. We will have data on them in due time; but there is no reason to believe the percentages will be appreciably changed. So we find that for four crop years we have been sending over 2 Northern wheat from Atlantic as well as Pacific ports, containing a great deal of Garnet, and one cannot help but think that if this wheat were very objectionable we would have had many more complaints than have been received. We actually have had a negligible number of complaints considering the large number of people who handle our wheat. I venture to say furthermore, that if we were to compare the number of complaints received during the past four years with those received in pre Garnet days that the former would compare very favourably. As a matter of fact, I am of the opinion that our 2 Northern to-day, as shipped from the north, is of a better quality than it was before Garnet came on the scene, because of the fact that this variety has practically wiped out large numbers of varieties which were really of poor quality.

I also have some data on 55 cargoes of number 1, 29 cargoes of number 2, 4 cargoes of number 3 and 6 cargoes of number 4 shipped to a certain Old Country milling concern from the 1932 crop, a concern with which we have been co-operating to quite an extent. I have people following these cargoes through, watching them very carefully, collecting samples and sending them to us for growing tests. In the case of these cargoes we find that the number 1 averaged only 3 per cent of Garnet—that was out of Vancouver.

Mr. DONNELLY: How many shiploads?

The WITNESS: Fifty-five.

Hon. Mr. MOTHERWELL: What year was that?

The WITNESS: The 1932 crop.

Speaking of number 1 it is again to be commented upon that our inspection department seems to be, as Mr. Hamilton quoted the other day, remarkably efficient in keeping Garnet out of number 1. As a matter of fact, in the spread there was nothing higher than 9 per cent of Garnet in any one cargo of number 1.



In the 29 cargoes of number 2 ex Vancouver there was an average of 42 per cent of Garnet; the 4 cargoes of number 3 contained an average of 35 per cent, while the 6 cargoes of number 4 averaged 33 per cent.

With regard to the number 3 grade out of Vancouver we find the spread runs from 19 per cent up to 69 per cent with an average of 43·6 per cent. This refers to samples collected by Mr. Fraser from the 1932 crop. The 3 cargoes out of Fort William ranged from ·3 per cent to 66 per cent, and, as I mentioned before, the fluctuations between cargoes in this case were more pronounced than were those in the cargoes from the Pacific ports.

MR. DONNELLY: Is that ·3 per cent?

THE WITNESS: Yes, ·3 per cent in 3 Northern out of Fort William, up to 66 per cent.

When one examines these figures one cannot help but feel that there must be something other than variety entering into the picture. No complaints amounting to anything from those cargoes leaving the Atlantic ports; some complaints from those leaving Vancouver containing a very high percentage of Garnet, the latter coming largely from the north. I think you will find in the last analysis that this question is tied up pretty closely with protein content—northern grown wheat, irrespective of variety at least to a considerable extent. It is true that Garnet is grown very largely in the north because of its early ripening qualities but here most varieties are inclined to yield a lower percentage of protein.

What I have said thus far would seem to support the views of those who do not favour the separate grading of this wheat at this time. On the other hand, there is certain information which our department would like to present and which would seem to offer some support to those who feel it would be better to grade this wheat separately. We simply wish to give all the data we have for the guidance of the committee that they may use their best judgment in coming to a decision.

Two years ago in presenting my evidence before this committee, (volume 2, page 33 of the evidence), I made this statement:—

The case for the separate grading of Garnet is undoubtedly, quite a strong one; but there is another side to this matter, and I take it that it is the wish of the committee to view all sides of the problem. So, this morning I propose to champion the opposite side; that is, that the time is not quite ripe for this particular action.

I am not quite sure, gentlemen, that the time is ripe yet, but I do feel it is a good deal riper than it was a couple of years ago, for reasons which I shall present. At that time the Garnet growers had not very much choice as regards variety. Reward, a possible alternative was being increased at that time, but there was not a very great deal of seed available and Reward, at that time, was not as good as Reward is to-day. I think I explained at that time that our department was doing everything it possibly could to improve upon Reward, to get the very best sort of Reward we could, and to find out the very best methods of seeding etc., as a means of increasing its yield. We knew that Reward was a very fine wheat especially for the north country because of its high protein content; in fact, it is about the only wheat we have to-day that will retain its high quality to any marked degree in the north country. As a result we have to-day large quantities of Reward seed all over the northwestern country, and we have found, as many growers have found for themselves, that by seeding Reward about two bushels per acre you can step up the yield appreciably.

I have for your consideration the yields as obtained at our stations at Beaverlodge, Fort Vermillion, Lacombe and Scott over a period of nine years,

and I think, perhaps, it would be worth while to quote these. At our Scott farm we find a difference of only about 2 bushels per acre in favour of Garnet over Reward. There is quite a spread at Lacombe, about 8 bushels, in favour of Garnet over Reward; at Fort Vermillion about 3 bushels, and at Beaver Lodge practically no significant difference. Both varieties ripen at about the same time. Reward is stronger in the straw and has also been found more suitable for rolling country, because of the fact that you can let your crop stand on the elevations, where it naturally ripens earlier, until the crop in the depressions ripens, without any great fear of shattering to any extent. That, of course, is not true in the case of Garnet. Under the highly tilled conditions which prevail on our experimental farms you will see we have not had a very great spread in the yields; but generally speaking we have found, however, that out in the open country Reward will not rustle quite so well as will Garnet, and many farmers have been finding that under rather poorly prepared conditions they may expect a fair crop of Garnet, whereas Reward might yield very poor returns. At the same time a great many farmers are finding that by properly cultivating the soil, and putting this wheat on clean grounds, and using about 2 bushels per acre, they are getting really very good returns indeed. And so there is that hope, and some might feel that under these conditions separate grading would not be a hardship. It would certainly not be anything like the hardship it would have been two years ago.

There is another matter which I think may prove helpful—Marquis Wheat. Marquis is still our standard variety. Two years ago we initiated the scheme of collecting samples from farmers wagons at elevators, and making growing tests to determine varietal composition. Last year we grew at 22 different points in the three prairies provinces samples from over 5,000 farmers—to be exact, 5,216 farmers. We went over these plots and classified the stock into good, poor and bad on the basis of suitability as seed stock. We found that over forty per cent of these people were growing a type of seed wheat that they should not grow. These samples were collected from 294 elevator districts, yet in every elevator district we found some first class material grown by certain outstanding men; and yet this was not known to any extent by any of their neighbours in the district. Incidentally, our scheme is to link these two people up through the medium of the elevator people, in order to reduce the number growing inferior grain. To me it was exceedingly interesting to find that a very large percentage of these men who were growing what they believed to be Marquis were growing wheat which contained very very little Marquis at all. They were growing a mixture of which certain many late Red Fife types predominated and naturally were likely to lose in grade as well as in yield. Many Garnet growers had been growers of the above wheat but dropped it because of the risks entailed and who would not have done so had they had genuine Marquis. Knowing there was a lot of this class of material in the west. We started five or six years ago to develop a superior strain of Marquis, and as a result we now have large quantities of this strain. Our Branch Farms at Indian Head, Swift Current and Scott, for instance now produce this strain of Marquis exclusively. We distributed a lot of this seed to registered seed growers who have been doing everything possible to get back into good Marquis. As a matter of fact one of the important problems in the West to-day is to re-establish Marquis, or a wheat of that type; and I feel that within the next two or three years this program we are going to step up the general level of wheat over large areas of the West materially, and I think to that extent we will reduce the acreage devoted to wheats like Garnet.

*By Hon. Mr. Motherwell:*

Q. Has it the same tendency to pie-ball?—A. It is a typical Marquis, very pure and uniform; there is no essential difference, in that respect I think.

Q. There won't be much difference between that and the typical old Marquis or Reward?—A. No difference between it and the typical Marquis except that it will probably remain constant longer.

I have presented in this chart (indicating) what we actually found last summer in going over these plots. For instance, take one of the northern points, Blaine Lake: here were 240 plots, from samples collected from 12 elevators; 24 per cent of these were real good, 30 per cent possibly good, and 46 per cent very very poor—so poor they should not be thought of for seed purposes.

You will note the percentage of different varieties grain point by point. We found that Garnet is being pushed back into the northern districts very materially but in many of these districts a very large percentage of the wheat grown is this variety.

Hon. Mr. WEIR: State what they are growing there.

The WITNESS: On the average, for the 294 elevator districts, we found that 45 per cent were growing Marquis; 16·7 per cent were growing Reward; 27·6 per cent were growing Garnet; 5 per cent Red Bobs; and only 3·9 per cent other varieties. In other words, these varieties—Marquis, Reward, Garnet and Bobs—represent practically 90 per cent of the varieties of wheat grown in the West to-day. The situation is quite different from what it was not so many years ago when we had a large number of varieties spread all over that country, and all kinds of mixtures and trash; but these early wheats particularly have cleaned out a lot of that material and so we have to thank them for that at least.

There is another matter I might mention: for Northern Manitoba and Saskatchewan, where rust has been known to be very bad, we will have in the very near future I feel sure, an early rust-resistant wheat which will mature within two days or so of Reward and which excels the latter in yield. If these hopes be realized, the Garnet grower of to-day will have still another alternation to choose from. I might also mention a number of very promising early wheats now under test and which we believe contain at least one or two which are likely to replace Garnet. As a matter of fact it is only going to be a matter of time. I think, until both Reward and Garnet pass into history. I mention these new wheats as possible hopes for the people of the north and as a way out of the Garnet situation. As a matter of fact, this question seems to resolve itself down to this: will this question settle itself without upsetting or altering our grading system; or will the solution be reached more quickly if separate grades of Garnet were provided. That, of course is for the committee to decide.

The CHAIRMAN: Gentlemen, I thank you for listening so patiently to Dr. Newman without asking questions. Before you question Dr. Newman may I say, that we have Mr. Sidney Smith here from the Winnipeg Grain Exchange, and the committee recommends that he be called as well. Will you bear that in mind when you put your questions to Dr. Newman.

Mr. CARMICHAEL: It might be well, Mr. Chairman, to have that evidence before questions are asked, the questions are involved.

The CHAIRMAN: You mean to say, call Mr. Smith now, before questioning Dr. Newman?

Mr. CARMICHAEL: Yes, because the subject is an involved one and the questions asked will be more or less along the lines of the 8 points that are outlined here, and we were expecting Mr. Smith to answer one of those.

The CHAIRMAN: I think that would be a very good suggestion, if the committee agrees. Dr. Newman will be here to be questioned. We will call on Mr. Smith, if the committee are agreeable.

Mr. SIDNEY G. SMITH, President, Reliance Grain Company, called:

The CHAIRMAN: Will you give us your full name and your occupation?



The WITNESS: Sidney G. Smith, President of the Reliance Grain Company.

The CHAIRMAN: You have a statement to make, Mr. Smith?

The WITNESS: Well, Mr. Chairman, I came to Ottawa without any knowledge that I might be called before this Committee, until yesterday; so I did not prepare a written statement in connection with the details of the spreads as they have occurred during the last two or three years. I notice that Mr. Weir mentioned in detail the spreads yesterday, but I have not the details of just exactly what the spreads were at Fort William and at Vancouver set out; but I will endeavour to answer this "Question No. 5" as well as I am able to, dealing with it in a general way; with this question of spreads and how they occur, the reasons for them.

During the past two or three years, the spread, as you have noticed if you have followed it, has fluctuated up and down—between No. 1 and No. 2 Northern we will say, as these are the grades mentioned in the question—and these spreads have sometimes been very close, and at certain times very wide particularly at Vancouver. The spread may go a little wider there because the delivery basis of No. 2 Northern on the Winnipeg basis is 3 cents under 1; so if it goes as wide as that there is a premium on No. 1 Northern that is a set spread for delivery.

Now, we take for instance the spread between No. 1 and No. 2 Northern: I think that either at Vancouver or Fort William it depends largely on the quality of the crop, and also on the quality of the crop grown in other countries. If we grow largely a high grade crop, we will say almost altogether No. 1 Northern, a great amount of No. 1 Northern, and there is no such amount of No. 2 Northern; and if, beginning with Vancouver, it happens that there is a good amount of No. 1 Northern there, and not so much No. 2, naturally the demand of those who want No. 2 would draw the price of No. 2 Northern closer to No. 1. On the other hand, a small amount of No. 1 Northern and a large amount of No. 2—the demand for the No. 2 Northern might draw it nearer to the No. 1. And then the same thing would happen at Fort William in either case; that would be accountable in a measure for the change in spread. Now, at Vancouver there are times when people are buying wheat for future use; and Vancouver wheat as you know does not reach the export market—its destination—until after 6 weeks to 2 months following sale and shipment. Future importers are buying wheat that they want to use over two months ahead; Vancouver comes into that picture a little more strongly than the Atlantic seaboard, where they buy wheat for immediate use—buy what they want from hand to mouth—they would be more anxious to buy wheat from the Atlantic seaboard than they would from the Pacific seaboard. So that would make a narrower spread on certain grades from the Atlantic seaboard than from the Pacific seaboard.

Then the question of freight rates comes into it also. Vancouver during the winter months, as you know, has a larger business than the Atlantic seaboard—or at least has its best business during that time when navigation is closed on the Great Lakes. In the matter of freight: with the freight rates cheap from Vancouver there would be a greater demand for Vancouver wheat; but with the freight rate cheap from the Atlantic seaboard, as they were last winter—very cheap from the Atlantic seaboard—that would be a predominant factor in developing a larger demand for wheat. Now, then, that is the condition which has existed during the past six or eight months, and it has existed longer than that, but more particularly during the last six or eight months—in connection with buying on the other side. The condition has been such that the importers have wanted to buy what they call "for immediate use"—what we call wheat sold on named steamers—from the Atlantic seaboard, instead of buying wheat that was going to take a longer time in delivery. They were buying from hand



to mouth, or for some reason buying it for mixing purposes. I do not need to tell this committee that our wheat has to be used to some degree for mixing to improve the quality of wheat from other countries. The proportion which they buy varies with the quality of the wheat which they get from these other countries, and, of course, that has an effect on price, with other things. They have been buying in the last six months more for mixing use, hand to mouth as we call it. They have not been buying with contract that would come in later. That is one of the reasons in the last six months why the spread widened at Vancouver. That is, I think, one of the reasons. I do not know whether I have explained that as clearly as I should. I have perhaps been a little disconnected in my explanation of it; but these are mainly the reasons, I think, for the difference in the spread: The quality of the crop grown; the demand, whether it may be nearby or for future delivery; and the condition of freights on the Atlantic and Pacific seaboard.

Now, I do not know whether I should go into this, but Dr. Newman has spoken of quality and the mixture of Garnet, and all that; and set it very clearly before you. So I do not suppose you wish me to say anything about that in connection with spreads.

The CHAIRMAN: We should have your opinion, I think Mr. Smith.

The WITNESS: Well, I will give generally speaking the information we get from our buyers in Hamburg, Amsterdam, and continental ports, when I was over there a year or so ago; and this year when our New York manager was over there. He said he never heard the name Garnet wheat mentioned in any of these countries. The criticism of Garnet seems to come principally, of course, from the United Kingdom, who are very large buyers of our wheat. But the continental ports have never complained to us, at any rate, about Garnet wheat being objectionable to them; and they had to buy a considerable quantity of No. 2 Northern Wheat, mostly it is true from us, from the Atlantic seaboard, but sometimes from Vancouver. Now then, in the United Kingdom we have noticed a preference, as far as our country is concerned, for the buying of wheat from the Atlantic seaboard; and we put it down—the first reason was they wanted near-by wheat and they wanted it quickly, and they did not want to tie themselves to future delivery contracts. We had some conversation when I was over there with various people about Garnet wheat, and there is no doubt that in the United Kingdom they feel that the Garnet wheat does not mill as well mixed with other wheats, because of the different treatment that it needs. And that has been the only complaints we have had. We have had no complaints from the continental buyers. As I say, we have never heard it mentioned by any of those buyers.

The CHAIRMAN: Have you any further statement to make about any of the other matters, Mr. Smith.

The WITNESS: I thought you wanted to stick principally to No. 5.

The CHAIRMAN: Are there any questions?

*By Mr. Vallance:*

Q. What percentage, roughly speaking, of your export business is done with the United Kingdom?—A. Well, during the past year, the percentage done to Europe with our particular firm was larger than with the United Kingdom. The United Kingdom kept telling us all the time that Argentine wheat was cheaper and we did more business on the continent. We did a fair business in the United Kingdom, quite a large business.

*By Mr. Brown:*

Q. I take it then, from what you have said about the cause of spreads, that it would be not be very easy for us to come to any conclusions as to the exact

effect the presence of Garnet had; or the amount of Garnet in any given sample, or out of any given part. There are so many causes that do effect spreads that it would not be possible for us to come to any conclusion as to what the effect of Garnet might be upon the spreads?—A. Well, some people have thought because the No. 2 Northern widened out at Vancouver during the period of the last six months that it was because of the larger mixture of Garnet wheat there; but strangely it did not widen out in that way in previous periods; and so I cannot say what the effect of Garnet wheat mixed in No. 2 Northern has upon the spread, because it has varied so much over the period that we have been working with it—the last three or four years that Garnet wheat has been in No. 2 Northern—and the spreads have fluctuated so widely in that time for the reasons I have mentioned, I think.

Q. We might as well put it out of the picture altogether as influencing our decision in the matter. That would seem to me to be the effect of what you have said?—A. Of course a great many people, as I said just now, think this large percentage of Garnet wheat in No. 2 Northern at Vancouver should widen the spread. As I say, that is one side of it, and yet on the other side we have the fact that during the period of two or three years Garnet has been there, the spread has been narrow there for No. 2 as compared with No. 1 Northern. Some mixture, as I take it from the evidence of Dr. Newman, has been apparent in the wheat at Vancouver—some large percentage over a period of two or three years.

*By Mr. Carmichael:*

Q. For how many years have you been doing business on the continent?—

A. For about 30 years.

Q. Have you noticed any difference in the opinion of our No. 2 grade wheat over there during the last three or four years in comparison with prior to that?

A. I can repeat only what I have said, that we have had no complaint about Garnet on the continent at all.

Q. I was not thinking of any particular variety. I was taking the general circumstance of the quality of our No. 2 grade; have there been any complaints as to its quality in recent years as compared with an earlier period?—A. No, I would not say so. I would say this, and of course it comes up often in connection with grain particularly with the European buyers: The European buyer has always complained a little no matter what he gets; when he gets something that is better he never says anything about it, but if he had no complaint or not, he would say it is not as good as the last; something like that. I say that specifically we have had no more complaints the last three or four years than we had in previous years. I would not say so, from the continent. But, as you know, we have had a great many complaints from the United Kingdom about Garnet wheat.

*By Hon. M. Motherwell:*

Q. Does that complaint come more from the Scotch millers than from the United Kingdom millers?—A. I think it is pretty general, Mr. Motherwell.

Q. We find the Scotch, and maybe the English co-operatives who grind many of them a hundred per cent Canadian wheat, and they complain that it is not of as good a colour as they would like to have it; whereas other millers combine Canadian wheat with others in such a way as to fix the colour to suit them?—A. Yes, the flour is rather darker in colour.

Q. Well, we in Canada—especially the growers—are very anxious to please our customers in Great Britain, and all our customers including our own millers, if we can; and we would like to go as far as possible in growing the kinds of wheat our millers and customers want; but as you have just said it does not really make any difference what you grow some people will complain and want something else— but that I suppose is just human nature. Well, you have so

many other kinds of Canadian wheat than just No. 2, would not they if they could not get what they wanted in No. 2, surely they could get it in No. 1, or No. 1 Hard, or No. 3, No. 4—on down to 6 if you like with all the ramifications, all the multitudinous types—all these various grades, such as No. 1 hard, tough even No. 1, smutty. I never could understand why our millers should take such a “scunner” at our No. 2—I do not know whether you are sufficient of a Scotchman to know what that term means or not?—A. Oh yes, I know what it means, all right.

Q. I do not see why they should take such a “scunner” at our No. 2, when they have so many other grades from which to get a supply? The thing which has impressed itself on my mind, Mr. Chairman, is this, why do they not take No. 1 Northern; we have got plenty of it. There have been times when everybody seemed to want to buy as little of it as they could, and buy No. 2 Northern, and for some reason they keep on buying no Northern so that it has become one of the best sellers on the British market sometimes. You all remember the trouble we had with our No. 2 Northern when it had that pie-bald Marquis in it?—A. I do not know about that, but I do know that during the last three or four years there has been a quite steady demand for No. 2 Northern in certain quarters all the time.

Q. Would not that be natural, Mr. Smith, when you have a No. 2 Northern that is really in the main a composite of No. 1 Hard, No. 1 Northern and No. 2 Northern. It is said that it averages 60 per cent Garnet and—what others are there, Marquis and Reward—you really have a composite of No. 1 Hard, No. 1 Northern, and No. 2 Northern wheats; consequently you are getting better value for your money than the old No. 2. Is not that one of the reasons why it is such a good seller?—A. It may be; as I say, the demand has been very fair at any rate.

Q. Have you heard any criticism of No. 2 on the Pacific on the ground of its looks—a lot of people think it is a better looking wheat than No. 1, and that it was rather embarrassing sometimes to the trade.—A. I have not heard that in this case, but I have heard of it and I have seen it myself, of course, and I would say that the Garnet wheat is a beautiful looking wheat.

Q. I think it bothers the Inspection department sometimes?—A. Mr. Fraser will have to answer that.

Q. We will wait until we get to him. Speaking about complaints, I think that where there is so much smoke there is usually some fire. Do you recall the complaints that were made by the various organizations and millers and the Liverpool Corn Exchange in 1927 and 1928 and in 1925 and 1926 in regard to the low character of our grain and the piebald nature of it and all kinds of white truck in it?—A. Yes, I recall it, generally speaking.

D. Do you think there were more complaints then than there are now?—A. I do not think there were any more complaints. The complaints then were from the U.K. mostly as they are now.

Q. About the same?—A. Yes, there have always been complaints of that kind.

Q. I guess, probably, there will always be some. Do you ever look forward to the time when there will be no complaints?—A. That will be the millennium.

Q. Well, we should get as near as possible to it, do you not think? If I thought these complaints were general and warranted I would take every step I possibly could to get rid of them, but the way the matter is running now with improved and further improved wheats, in the offing it looks as if the matter would very soon solve itself. However, speaking of the other matter of complaints—

Mr. COOTE: Have you not got the book of complaints?



Hon. Mr. MOTHERWELL: This is the report of the select standing committee on agriculture and colonization for 1928. This is the same committee in 1928—not the same personnel, but the same committee. Here is the correspondence. You know who Mr. Urquhart is, Mr. F. W. G. Urquhart, secretary of the Liverpool Corn Exchange, and this particular year followed three years that we had a lot of complaints—1925, 1926, and 1927, and it got so bad that Mr. Urquhart, acting on the instructions of his board, wrote this letter. This is a long communication, and I will not read it all:—

There is no doubt whatever that, during the last two years—1926-27 and 1927-28 (so far as the latter has gone), there has been a very serious deterioration in the quality and condition of Canadian wheat shipments, especially in respect of Manitoba wheat grade number 3 Northern and my directors cannot accept the explanation that the weather has been entirely responsible for the poor quality of wheat received in this country and on the continent.

There was practically if not actually no Garnet at that time:—

It is quite apparent that the standard sample of number 3 Northern Manitoba wheat 1927 is greatly inferior to the relative standard for 1925. My directors submit that to try to maintain a regularity of standard from year to year is essential and, if Canada has an inferior crop, that it ought to be graded accordingly.

And that was certainly before Garnet wheat. Now, this is in the middle of the letter, and I take one quotation from the very last of the letter:—

Our merchants and millers have, during the last year or two, lost a not inconsiderable sum of money owing to their having trusted in the value and independence of Canadian Government Grain Certificates, and if their confidence is not to be further shaken, my directors state emphatically, that it will be well for Canada to review her grading system and to abolish its obvious faults.

I may say we have done that with success after very extensive enquiries in 1929 and 1930. Of course, you have heard of mixing of grades I have no doubt?

The WITNESS: Yes.

Hon. Mr. MOTHERWELL: That has been abolished by law and I think in practice too. We were naturally looking for improvement, and I think there is improvement. The letter continues:—

As this letter goes far beyond the particular complaint regarding the "Albertic" shipment, and as the matter is of such grave importance, my directors have instructed me to send a copy to the Prime Minister of Canada, in the hope that the government will take immediate steps to make alterations which will meet the views of Canada's best customer for her exportable wheat and at the same time be approved by her wheat producers, millers and merchants. Signed F. W. G. Urquhart, secretary.

Now, the Prime Minister of Canada at that time was the Honourable Mr. King, and I naturally was interested in this, very much interested. I endeavoured to look into the matter; in fact, I took a trip to Europe and the United Kingdom myself in 1928 to see "what was the matter with Hannah" as we sometimes put it, and I found there was a lot the matter with Hannah, and there were a lot of Hannahs, not only in the United Kingdom but all over Europe—some terrible examples of the mixing of wheat with all sorts of truck in it that would not make flour. Somebody had to pay for exporting that. Mr. Hamilton was with me on part of that trip and he saw what I saw, and when we came back to Canada, as far as I was concerned, I did not let the grass grow under my feet until I endeavoured to get this corrected. And parliament did correct it; this committee



did correct it immediately after this letter came to the Right Honourable Mr. King. This is from the Secretary of the greatest corn exchange in the world. The Liverpool Corn Exchange has more to do with setting our market price than any other, and Mr. Urquhart is known all over the wheat world as a responsible man, and here is what he writes to Mr. King:—

My directors wish to assure you that they do not forward any complaints until they have very carefully examined the shipments and are fully convinced that the receivers are justified in making them. They have refused to interest themselves in many instances where they have found, on investigation, that the complaints though far from frivolous were not sufficiently serious to call for action on their part. In years gone by, complaints were few and far between, but since the autumn of 1926 they have been very numerous, and the confidence which the trade used to place in Canadian certificates has been badly shaken.

My directors find that the whole U.K. and Continental markets are becoming very dissatisfied with the arrival of wheat under "certificate final" . . . .

Mr. DONNELLY: What year was that?

Hon. Mr. MOTHERWELL: 1926 and 1927.

Mr. DAVIES: What was the date of the letter to Mr. King?

Hon. Mr. MOTHERWELL: The 15th of February, 1928. This correspondence was tabled then. To continue:—

. . . and unless matters improve they are quite certain that there will be a strong agitation to discontinue this method of trading and to insist upon buying on standard samples in the same way as trade is done with other countries, such as the Argentine and Australia.

You know it has been the pride of our grading system that we live up to our certificates so religiously that people buy wheat on certificate without ever seeing the wheat. They say that they want so much number 1 or number 2 or number 3 and they expect to get that; and there are no adjustment provisions to settle when our grain is bought on certificate.

WITNESS: Fair average sample.

Hon. Mr. MOTHERWELL: No, but there is a board to which you submit these matters in dispute when bought on fair average sample as in Argentine and Australia. Therefore, there must be a strict adherence to certificates. That is what they were complaining about—non-compliance to certificate; there were too many varieties; it was bum stuff—piebald, yellow bellied Marquis wheat; that is what it was—from the north country largely, but sometimes from the south on second crop land. And there were other reasons. There was a white spring wheat called "quality" wheat—the very opposite of what it was—that got mixed in sometimes.

The WITNESS: And there was a lot of tough wheat those years.

Hon. Mr. MOTHERWELL: The millers of the Scottish and English Co-operatives, nearly every corn exchange I could find in the United Kingdom, both in Ireland, England and Scotland, and on the Continent as well, had the same story to tell—especially with regard to the amount of dirt, rubbish and screenings and white kernels that went in our wheat at that time. There is no need to go into the matter of mixing now, but we all know that mixing had become very general among all the concerns handling wheat and each was vieing with the other to see how much stuff they could pass off for wheat.

The WITNESS: Well, but they had to get a certificate for it, you know, from the inspection department.

Hon. Mr. MOTHERWELL: I know, and sometimes I have wondered how they got a certificate at Fort William for such cargoes. I have wondered. I am glad to know that the fellows who were there then are not there now—I am referring to Fort William, because this has nothing to do with Mr. Fraser. He gives a certificate and, like David Horne and Mr. Searle, belongs to the class of men who, like Caesar's wife, are above suspicion—only there is the difference of sex. Now, that is a state we came to in those years dating from 1912 to 1928, and that is what alarmed us in Canada when the facts became known.

Mr. SPROULE: Mr. Chairman, do you not think we have the wrong speaker? Somebody else may want to ask questions.

Hon. Mr. MOTHERWELL: I am exposing the situation that prevailed when our government was in power and previously. I do not think that is unfair, Mr. Sproule; nor do I propose to sit down until I am ready. I merely wanted to point out, Mr. Smith, that there were very serious complaints during that time, and there is the record of them. Those complaints have been corrected by the work of this agricultural committee—due to the recommendations of this committee being carried out by parliament without any deviation whatever, showing the value of this committee in getting reforms if we can get the evidence before us. And we had the evidence, as already indicated. It is too long a story to tell you how that condition came about, but it came. It had been developing for twelve or fifteen years until it got to that condition, and the correction followed.

It is said by some that there are complaints now regarding our wheat, and there are some. In Scotland, where they grind 100 per cent Canadian wheat largely, they are in the same position as the Canadian miller, almost—with this difference: they can correct the colour question by getting other wheats and Canadian millers cannot do that. Now, speaking generally, you are familiar with those complaints in those years, as an exporter.

The WITNESS: Yes.

*By Hon. Mr. Motherwell:*

Q. But being on the continent you would not run up against it as much?—

A. We were familiar with that whole situation.

Q. Do you take the ground then that the complaints are quite as numerous and as serious as they were; is there any complaint from Mr. Urquhart now?—

A. I have never had any direct communication with Mr. Urquhart, but there are complaints regarding Garnet in the 2 Northern from the United Kingdom.

Q. There is no doubt about that. You have had them from chemists—principally from chemists?—A. Well, from the millers over in the United Kingdom.

Q. Well, from chemists representing millers?—A. Yes.

Q. I recognize that those who grind 100 per cent Canadian wheat have a complaint because of the question of colour, and we want to overcome that if possible. How can we reduce this complaint to a minimum? We have heard what Dr. Newman has said, and if those complaints are strong I do not see that any of us are so stubborn about this Garnet wheat that if we are certain it is hurting us we should try to remove the ill effects; that was done following these other exposures. Those who were responsible for correcting that in this committee are just as anxious today to correct any difficulty if it is correctable. And may I ask you this question, Mr. Smith, in regard to it. You heard Dr. Newman's address?—A. Yes.

Q. Do you think, in the face of that, if Garnet wheat were removed to the last pickle of wheat you would then get as high a protein wheat and as acceptable a wheat as to general quality from the Pacific as you would from the



Atlantic?—A. I think that the wheat that is grown in the northern section we may regard as having a lower protein content than that grown in the south, and when we have very bad crops in the southern part of the provinces and a good crop in the northern part of the provinces, naturally the protein content on the average would be less at Vancouver; and it would be less at Fort William too than in years when it was grown generally all over the country, no matter what variety it is.

Q. That is right. Now, Dr. Newman said that there were cargoes going from the Atlantic with 60 per cent Garnet, and Mr. Hamilton indicated that there was some creeping into the Atlantic shipments. It has been going on all the time since 1928. It was easier to make a complaint against Vancouver, the charge being chargeable to northern grown wheat, say, from the Peace River country, which is a wonderful grain country. Now, that northern country is being peopled by farmers who have been driven out of the south by drought, grasshoppers and what not and they are flocking up to grow Garnet wheat in the north—or whatever wheat is best in that country. We follow them up and say that they cannot put their wheat into Manitoba grades. That is the proposal. You can make a separate grade. If that could be carried out in a practical way I suppose that would be the solution, but with regard to separate grading in the past it has meant the death of that variety. Manitoba wheat has got such a good reputation that anything that is not Manitoba wheat is unfavourably considered, although there is little wheat grown in Manitoba today compared with what is grown in Saskatchewan and Alberta; but Manitoba wheat as such has got such a good reputation that if you call a type of wheat anything else it is not well favoured on the market. We might as well face this fact that when you put Garnet wheat into a separate grade it is as good as a gone goose. Now, with so many farmers growing Garnet wheat we have to study their side of it also. Have we or you, Mr. Smith, interest in the producer of that wheat?—A. In the grain trade in Winnipeg whom I represent here in an informal way before this committee, I know opinion is divided. The grain trade in Winnipeg is entirely interested in the welfare of the producer in that they depend upon producers as their customers. Opinion is divided. I think there are some who believe that Garnet wheat should be separately graded for the reason that they think if Garnet wheat is as good as the preponderance of Garnet wheat supporters believe and it is put into a number 1 and number 2 Garnet, its price and its value and its demand would naturally be shown by separately grading Garnet. Those who believe in that say it would bring out the true facts of the case. It would show that Garnet is worth more or less than the others according to what the markets of the world demanded.

Q. What would be the natural effect for the first year or two while Garnet was getting to be known?—A. It would be difficult to say what the price would be. That is one thing we have been puzzled about. We would have to find out how it would find acceptance in the import market.

Q. What is the natural result of an unknown commodity going on to a market?—A. Of course, once the grades are established it will not be an unknown quantity.

Q. It will until it gets onto the rolls. If you have a new grade of 1 Garnet or 2 Garnet, whatever it is—you said yourself that it was unknown on the continent—will not that be what it will be still if you christen it 1 Garnet?—A. What I think will happen is this. I am speaking of the argument of those who believe it should be graded separately, and what they think would happen. When 1 and 2 Garnet are graded separately—people know Garnet wheat, generally speaking, in the Old Country; they know what it is; and those fellows on the continent, although they never mention it to us, they must know something about it—I think what would happen first is that standard samples would be sent over, as I understand they always are, and people would know about



what they might expect to get in a 1 or 2 Garnet after they got the standard samples.

Q. I think not. If we decide entirely by the standard sample physical appearance it would be at the top of the list?—A. Every year, in connection with standard samples, our protein and gluten content varies so much that the overseas importers do not know by the first shipments what they are going to get exactly, and it would be the same in this case.

Q. You do not think it would be very serious then—the less price that would be obtained for Garnet wheat when graded separately?—A. I am not prepared to say whether it would be, sir.

Q. It would be a pure guess?—A. Yes, it would be a pure guess.

Q. That is probably so, and nobody will know exactly until it is tried out?—A. I would think they would get standard samples, and those people in the Old Country have long experience.

Q. Now, that north country is a great and vast land. You do not hear anything of grasshoppers and rust up there, and you do not get any more early frost than many points farther south. I have seen that country free from frost when the south is frozen, and I do not like to see those northern farmers unnecessarily hurt. Outside of that I take absolutely no interest in the matter. I am interested in all Saskatchewan and all Canada and I am not a grower of Garnet wheat. I am going to ask you this: in justice to these farmers, in justice to the fact that they have been represented as being carried on the backs of the southern farmers who grow Reward and Marquis, and in view of the fact that there is almost sure to be a lower price for Garnet for a couple of years after it has been put into a separate grade, would it be a solution of the question—we have heard of wheat bounties before, and possibly justified, and we do not want to do anything that would increase the quantity of wheat just now—but would it be a fair suggestion to make that for a year or two, supposing Garnet is put into separate grades, for the state, we will say, who has charge of this matter—the state weighs the grain and grades it and has charge of the whole grain business of the country, which is one of the greatest pieces of social service that could be given by the state—in justice to those farmers in the north who are growing this wheat which was put out by the same federal government as other new varieties, would it be a solution, I enquire, to partially indemnify the loss which might be sustained by growers of this grain for a year or two after it was put into separate grades.

MR. VALLANCE: I would like to ask you a question, Mr. Motherwell. What is the average production per year of Garnet wheat and as well the average production of Marquis wheat in the two instances you are speaking of—the southern farmer and the northern farmer? You are proposing a bonus in your suggestion. You are asking if it could be done—to bonus an individual in the north who probably is growing from 20 to 25 bushels to the acre as against the fellow who is growing 16. I am one of those that average about 16.

HON. MR. MOTHERWELL: I would say it could only apply to those growing Garnet to-day. That would have the effect of restraining others from starting to grow Garnet, but it could be made to apply, I imagine, only to such growers who are engaged in growing Garnet now. I am merely throwing out the suggestion.

MR. BROWN: The witness should not be expected to answer that.

WITNESS: I could not answer that question; there are so many implications and details.

*By Hon. Mr. Motherwell:*

Q. I just raised the question as a possible solution. The state has put out two new wheats which are outstanding in certain particulars. There is some

obligation on the state for doing that, and they have also taken charge of our entire grain business. They bring down the vote every year and indemnify themselves by the fees they charge for grading and weighing. Now, if the same state is going to say that this wheat which they put out is not quite up to the mark in some respects; that it is embarrassing some of our best customers in England and Scotland especially, and that they will provide them with another suitable wheat—and Mr. Newman intimated that a lot of other wheats were coming along—if they are let alone and some people are not too fussy I believe this condition will solve itself. Now, would not that be a fairer way of treating the present Garnet growers than to say that you cannot use this precious name "Manitoba" any longer? Manitoba wheat is known all over the world as an especially good wheat, but you cannot get Garnet into it any longer. The same state that encouraged those farmers to grow Garnet should surely somehow let them down a little easily. I submit that for your consideration, and whether that comes under your purview or not you might think it over and give us later the benefit of your cogitations. However, the question I would like to ask you is this: do you think, after having reviewed such authorities as I have given you, as Mr. Urquhart, that there are as many complaints to-day; and have you heard a single complaint by any such name as Mr. Urquhart during the last four years?—A. I have not the complaints here in detail, but we have had plenty of complaints, and I think we always will have them, particularly from the U.K. I think the complaints which you mentioned—of course I do not want to enter into an argument with you—were exaggerated by the miller with the view of getting more for their money.

Q. Exactly?—A. The buyer always wants the most he can get for his money.

Q. Of course, that is so; and it is quite possible that that is what is actuating our millers now?—A. No.

Q. You know what is said about the miller's cow; it is always in good order. But would not the same human nature possibly prevail among our millers during these hard times to get something a little cheaper than they are getting it now?—A. It might be.

*By Mr. Weir:*

Q. Could you tell us, Mr. Smith, the attitude of the grain trade towards hedging with reference to Garnet wheat if it were put in a separate grade?—A. We have been talking that over, but until we know what the standards would be and until this matter is settled and the standards are set, we, of course, could not properly determine even what price we should start it at on future deliveries. We are anxious, and the trade is entirely anxious and willing, and not only that, but they will co-operate in any plan, not only because they require to, but they will whole-heartedly co-operate in whatever may be done in connection with this matter; but they cannot very well, until the standards are set and until everything is centred, set a delivery price on any of their futures, but they can after that.

Q. Supposing it were decided to put Garnet into a separate grade this year, how long would it be after that announcement was made before the grain trade would be able to express their opinion with reference to hedging? Some two years ago it had almost been put on the board, had it not?—A. Yes, it was considered.

Q. What was the spread they had in mind, do you remember? I think it was 8 cents, was it not?—A. I do not remember exactly, but I think it was 5 cents below on the 1 Northern and 3 cents below on the 2 Northern. Maybe Mr. Evans could answer that.

Mr. EVANS: I think it was 8 cents at that time—two years ago.



Q. Two years ago?—A. I was going to say that this year when we were discussing it, with every thought in the matter, it was discussed all the way from 2 cents to I think 5 cents; and we thought maybe 3 cents would be fair.

*By the Hon. Mr. Weir:*

Q. Below No. 2?—A. Yes, three cents for No. 2 Garnet below No. 1 Garnet; and 3 cents for No. 2 Garnet below No. 2 Northern.

*By Mr. Vallance:*

Q. That would mean that No. 1 Garnet would equal No. 2 Northern?—A. That is what we talked about.

*By the Hon. Mr. Weir:*

Q. Which, in your opinion, would bring the better price to the producer; the continuance of No. 2 in the Northern with Marquis and no Garnet; or No. 2 Northern with Garnet grown as it is?—A. Well, we have had experience with the former, and we know how we can dispose of it. We have had no experience by which to know how we can dispose of it in a separate grade.

Q. No, no; I mean No. 2 Northern with Marquis in it, as before Garnet came in; or No. 2 Northern with Garnet in it as it is now; which is the better No. 2 grown in the North from the standpoint of selling. What I have in mind is this: do you think it is a better No. 2 to sell with Garnet in it than Garnet would be in a separate grade, the result being that the price of Garnet would go down for a year or so and the effect then would be to have people go into the growing of Marquis, which might be still more detrimental against our No. 2 than to leave it with the Garnet in. Do you get my question?—A. Yes, I think I know what you mean. You can take the condition as it exists right now in the matter of price—

Q. With Garnet wheat grown in the North, we have No. 2 Wheat with Garnet mixed in it. If there were no Garnet we would have No. 2 with possibly Marquis—they might go to Reward or to Marquis—it depends on the yield—but that question would come into it?—A. Well, it is a hard thing to answer.

Q. You cannot base it on the demand before Garnet came in, because there were a lot of complaints then?—A. You will notice that before Garnet came in the spreads were even wider between No. 1 and No. 2 Northern, according to this list that you have here, than they are now. That is partly accounted for because of the fact that we were enjoying a higher level of prices, and naturally the percentage of difference in value was wider. Right now it appears that the millers on this continent—we do not sell wheat separated abroad, it goes on our certificate generally speaking; I think one or two lots have been sold—but generally speaking the millers in this country will buy Marquis No. 2 Northern, free from Garnet, and pay more for it than they will with Garnet.

Q. Would that be Northern wheat, or Southern wheat?—A. They will buy from the south, largely; there is less Garnet, of course, and they will pay more for it separated than they will for a No. 2 Northern, with the Garnet in it in this country. The millers in the Old Country do not get that opportunity, they get it altogether. I do not know whether or not that is the answer to your question.

Q. No, it is not altogether. The point I am concerned about is this, the quality of our wheat. In that No. 2 Northern grown in the North with Marquis, it was a poorer looking wheat, at least. Now, with Garnet in it, it is a better looking wheat?—A. Yes.

Q. Therefore, I think that the millers perhaps would be more anxious to buy it—I am just discussing the Northern entirely with the Garnet in it—



than if Garnet were taken out. Would they pay a better price for it than they would with Marquis in it?—A. I can only give the experience of Canadian millers, they will buy only Marquis and Reward wheat from the North.

Q. From the North?—A. From the North, they will buy it segregated at a better price than they will pay for a general mixture of Garnet.

MR. VALLANCE: Mr. Weir, don't you think you could get the answer to the question you are asking from Mr. Fraser? I was going to ask Mr. Fraser whether there was as large a percentage of Garnet in No. 2 wheat coming out of the North as there was . .

MR. FRASER: I have no figures with me along that line, and it is pretty hard to go back six or seven years. From memory I would say that a great proportion of wheat out of the North prior to the introduction of Garnet was No. 2 Northern wheat, especially in the years when there was no frost.

MR. VALLANCE: So that as far as grading is concerned then, Garnet did not add anything. In your opinion we could still get it by growing Marquis?

MR. FRASER: If the season is good, and they get it fairly developed.

THE CHAIRMAN: And what about yield?

MR. FRASER: Of course, I don't know—I think Garnet would yield a higher per cent.

*By Mr. Vallance:*

Q. There is only one question I would like to ask Mr. Smith: the complaints we are dealing with; now, it is said there is too much Garnet in No. 2—I think that is the complaint coming from all sources—now, as an exporter,—and if you do not care to answer this question I will not force you—would it help your business, or facilitate it, or improve it—because I am one of those who believe that if we can improve your business in the export market, it will dribble down through to the producer—well now, by putting Garnet in a separate grade, would it have the effect of improving your business?—A. Well, I do not believe that it would have the effect of improving the business, or the volume of wheat shipped; because, I think that Garnet would find a price at some level, and people would be buying it—either higher or lower—and we would be selling about the same quantity of wheat, as far as I could see. We are now selling all the wheat, I think, that can be sold from Canada. Taking into regard the price and quality of crops of other countries—in a year of very poor quality in other countries, there will be a demand for our wheat regardless and the price would go up.

Q. It would not improve your position any by putting it into a separate grade?—A. It would not.

*By Mr. Davies:*

Q. Would it be safe to say, Mr. Smith, that you represent one of the largest exporting firms in Canada?—A. Yes.

Q. Would you have any objection to disclosing about how many bushels of wheat you export?—A. There is no private reason. The export business in Canadian wheat, as far as Canadian firms are concerned, is largely done by a few sources; because, on account of the difficult times that we have been passing through, a great many have gone out of the business. There are probably three or four large Canadian exporters, and then there are large continental firms—such as Dreyfus and others who also are large handlers of wheat. I do not know relatively—exactly—what we handle in relation to others, as I did not add it up last year.

Q. Could you say offhand?—A. I figure offhand we probably ran about—I think two years ago we ran one-ninth of the amount; and I think we are running about one-ninth to one-seventh of the amount, including our New York office.

Q. That would be about 20,000,000 bushels then?—A. Yes.

Q. And you export direct to the man who is milling our wheat into flour in the United Kingdom and on the continent?—A. We export direct to agents. We have agents all over the continent, we have had them for years—and in the United Kingdom; agents who transact the deal between ourselves and the millers, either as principals or as agents.

Q. Well now, assuming that that 20,000,000 bushel figure is approximately right, can you give the committee any idea as to how much of that wheat you export ex-Vancouver, and how much of it goes ex-Atlantic ports?—A. I did not bring those figures down, and I could not even roughly say. I can secure that later for you, but I could not even roughly say at the moment. We have been doing business in Vancouver, and continue doing a little all the time.

Q. But you predominate on the Atlantic ports?—A. We do a big business on the Atlantic, yes.

Q. Could you give us any idea as to the proportion of wheat that goes to the Continent as compared to the proportion which goes to the United Kingdom?—A. That would be hard for me to do just now, because as I say I was not expecting to come before the Committee and I did not get these figures out; but we do a fairly large business with the United Kingdom, although I think the majority of our business is on the continent.

Q. You said, Mr. Smith, in effect,—I copied your words down, “the spread between 1 and 2, the spread between the different grades depends largely upon the quality of the crop”—and you mentioned the question of freight rates which sometimes drop as between one port and another. I presume if the Vancouver rates dropped to Europe the Atlantic sea ports would adjust their rates to equalize the differential; that usually follows, doesn't it?—A. It does not follow altogether. The way it works out is this: the Atlantic seaboard has a tremendous amount of what we call liner space coming in.

Q. I understand what you mean?—A. That must be filled with something. The tramp steamer business comes in haphazardly, as they get cargoes or for one reason or another; so we get very low rates at times on the Atlantic, particularly out of New York we get very low rates because of the great amount of tonnage that comes in there, and in the open season of navigation on the St. Lawrence River where there is a good deal of liner space frequently.

Q. I want to get a little more exactly to this question: Would not the difference in the freight ex-Atlantic and ex-Vancouver be largely governed by demand, would not that be the determining factor?—A. Well, I would think, as I have said already, that during the last six months there has been a disposition on the part of the buyer to buy nearby shipments which he gets from the Atlantic; and not to buy much heavier shipments coming along later. I do not say that is all, but it would be something.

Q. Would it be safe to say, broadly speaking, quality will have a very marked effect on price in the long run?—A. Yes.

Q. Now, I think it is generally conceded that if Garnet is graded separately, that the immediate effect would be a drop in the price of Garnet as compared with other grades?—A. I did not get that exactly.

Q. I think it is generally conceded that if Garnet was graded separately, the immediate effect would be—at least for a year or so anyway—that the price of Garnet would fall relatively. Assuming that is so, would it be unkind to assume that the millers in Great Britain would stand to benefit considerably from a monetary point of view?—A. I cannot say that I really believe that if separate grades for Garnet were put in that it would drop considerably. I do not believe that. I believe that the value of it graded separately would be apparent very quickly, and that if it was really worth as much as some of us think it is, it would find a market, and it would soon come in the course of a short time to find a market relative to the other grade; just as No. 2 Northern

finds a relative market with respect to No. 1 Northern, No. 2 Northern, and so on.

Q. Mr. Ramsay before the committee in 1932 suggested that he would not be surprised to see that drop go to the extent of ten cents; and according to the discussions of the exchange at Winnipeg they have anticipated a spread of anywhere from three cents to eight cents?—A. In the later discussions we had when this thing was brought up awhile ago we found a very great difference of opinion; we found some people who even thought two cents might be the price, others who thought 6 cents might be the price; and so we were in a sort of quandary as to just what the spread ought to be. But we figure it would probably adjust itself in a period of operation.

Q. In any event, if it does drop the British miller stands to benefit considerably financially by such drop at the outset, does he not?—A. If it drops it would be because he does not want it. It would not drop if he thought it was of value, because he would be buying it, you see. That is why we feel that it will settle itself if it is graded separately.

Q. I mean, in the period of adjustment?—A. It might, in the period of adjustment.

Q. He would stand to benefit substantially?—A. If he bought it below its value he certainly would.

Q. If he buys cargoes out of Vancouver averaging 65 per cent, if he is still going to continue to use that, and buys it considerably cheaper, he does stand to benefit financially during the period of adjustment?—A. But there is this factor, Mr. Davies, when you have Garnet separately graded—the tempering of Garnet is a little different process than Marquis and Reward; and there are people who think if Garnet was tempered separately it would sell for more money. I do not know whether that is the case or not.

*By Hon. Mr. Motherwell:*

Q. Did you ever know of a wheat graded separately that ever lived more than three or four years?—A. Yes.

Q. What?—A. Durum.

Q. That is not a milling wheat, everybody knows that is for special purposes?—A. I never knew of any other wheat being graded separately.

Q. What about White Fife, Quality and Quota?—A. Those were wheats that were not widely sold.

Q. White Fife was?—A. I don't think so.

Q. Oh yes?—A. It has gone out of use altogether. These grades that you mention are comparatively small matters compared to the growing of Garnet wheat.

Q. I was just citing them as illustrations?—A. I would like to say this, the grain trade has no particular bias in either direction, they are very divided in their opinions on it.

*By Mr. Vallance:*

Q. How would it be if you were to start it out as a separate grade at the same price as No. 2 Northern now, and then see how much of it would be bought at that price to try it out?—A. As soon as we know standards are set, we will have to get somewhere in connection with something like that; because, I do not think the grain trade want to stand in the position of setting a value on these spreads and become open to criticism for that. We want to see the market value of the thing established as quickly as it possibly can be. It seems to me that it would not be very long if these separate grades for Garnet come in before there would be some value clearly established for it through demand.

Mr. LUCAS: If you set a price three or five cents a bushel lower than the Manitobas, aren't you saying to these people over in Europe that it is not worth



as much; naturally they would not want to buy it. Now, if you assume that Garnet is as good for milling purposes, only that it should be milled by itself, why not start off at an equal price with the others and find out if the European and United Kingdom people will buy it at that price?

Mr. BROWN: I think there is a point there that is being overlooked by some of the speakers when they suggest putting it on at an equal price. We have already assumed that Garnet is not equal to No. 1 by putting it in No. 2.

Mr. VALLANCE: Only as a mixture.

Mr. BROWN: We have admitted that Garnet is not as good as No. 1 Marquis or Reward by saying it cannot go higher than No. 2. Let us start from that point.

Hon. Mr. MOTHERWELL: That is right.

Mr. BROWN: Mr. Davies spoke about the British millers standing to gain by it. Now, he will only gain if No. 1 selling separately goes lower than No. 2 to-day; that is the only condition, if No. 1 goes lower than No. 1 Garnet if it is graded separately should go—lower than No. 1 Northern Marquis or Reward—then of course the British miller might gain; but it will only be on that condition. Now, if I understand Mr. Smith he has suggested that the possible spread in price—that is the difference between No. 1 Garnet separately graded—might not be lower than the price of No. 2. Now, if that were true there is no difference to the producer. Let us try and recognize what we have already done when we have assumed that Garnet is not equal to No. 1 Northern by saying that it can only go with a No. 2. Start on that basis.

Mr. PERLEY: Then you are not doing the producer any injustice at all.

Mr. BROWN: No, not at all, unless the spread is greater than that.

Mr. DAVIES: Mr. Smith said that if Garnet was graded separately, time would establish a price for it ultimately. He is emphasizing the idea of time. Now, over a period of years, we find that the price of No. 2 ex-Vancouver is better than the price of No. 2 ex-Atlantic ports. I suggest that the time factor there indicates that they are paying a premium for Garnet out of Vancouver.

Mr. CARMICHAEL: In which case, if it is graded separately, Garnet wheat would raise in price above Marquis.

The CHAIRMAN: I would just like to point out that all this is rather in the nature of discussion than evidence. It is nearly one o'clock.

What about calling the witnesses.

Mr. VALLANCE: Before we do that I would like to say to Dr. Newman that his evidence was so complete and so interesting that we were not prompted to ask him questions; I hope he will not feel slighted on that account.

The CHAIRMAN: Dr. Newman will be here to answer any questions the committee may wish to ask later.

Hon. Mr. MOTHERWELL: That is a great compliment to you, Dr. Newman.

*By Dr. Donnelly (To Mr. Newman):*

Q. In your examination of these wagon lots, did you get much Garnet and other wheats mixed in with them?—A. Garnet was fair, it is about the purest of any wheat we have in the west.

Q. I do not mean that, when you got your wagon lots there for testing, I suppose you got some Garnet, some Reward, some Marquis; did you get much Garnet mixed with it—was there much of a Garnet mixture?—A. Garnet and Reward are becoming mixed more, but not to such a great extent as yet.

Q. I was only thinking of the percentage of these wheats?—A. On taking these samples from the elevators, we did find quite a mixture there; a certain percentage of Marquis, a certain percentage of Reward, and so on.

Q. I can understand that from the elevator. I was thinking of Garnet in particular farms, the wheat right from the farmer himself—the mixture as they go into the elevator?—A. No, not a great deal as yet; the greatest mixture from the individual farmer is in the Marquis.

*By Mr. Brown:*

Q. I was going to ask Dr. Newman about the grade of Marquis: do you find any difference in its rust-resistant qualities?—A. No, not at all.

The CHAIRMAN: I think the thanks of this committee are due to Mr. Smith and Dr. Newman. I was going to ask Mr. Carmichael what other witnesses would be called, or perhaps you would prefer to leave that to the clerk.

Mr. CARMICHAEL: There are two other local witnesses, Dr. Tory and Dr. Grindley.

The CHAIRMAN: How would it be to have Dr. Tory and Dr. Grindley on Tuesday, and in the meantime word can be sent to Mr. Brouillette, and such others as are to come from outside points. We will have to divide our time with them and possibly have another meeting on Thursday. There is one to come from Montreal, but I do not think it will take very long to get him; then there is some representative from the English Co-operative Society. I think we will leave it to Mr. Carmichael and his committee to arrange to bring these witnesses here—I think that will be satisfactory to the committee.

Mr. CARMICHAEL: I do not think that the committee feel like doing that, I think they were exceeding their jurisdiction in even making the suggestion. I think we had better leave it to the chairman and the clerk.

The CHAIRMAN: Very well. Thank you, gentlemen.

The witnesses were discharged.

The committee adjourned at 1 o'clock p.m. to meet again on Tuesday, May 22, 1934, at 11 o'clock a.m.

















CORRECTED COPY—SUBSTITUTE FOR No. 6, ON FILE

SESSION 1934

HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

---

MINUTES OF PROCEEDINGS AND EVIDENCE

---

TUESDAY, MAY 22, 1934

No. 6

---

Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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WITNESSES:

Dr. W. T. Grindley, Chief of Agricultural Statistics Branch.  
Mr. R. T. Jackson, Co-operative Wholesale Society, Montreal.  
Mr. L. H. Newman, Dominion Cerealists.

OTTAWA

J. O. PATENAUDE

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1934





# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

Tuesday, May 22nd, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon, Mr. Senn, the Chairman presiding.

Members present:—Messieurs Barber, Bertrand, Bowman, Bowen, Boyes, Brown, Carmichael, Davies, Donnelly, Dupuis, Gobeil, Golding, Hall, Jones, Loucks, Lucas, McGillis, McKenzie (*Assiniboia*), Moore (*Chateauguay-Huntingdon*), Motherwell, Mullins, Perley (*Qu'Appelle*), Pickel, Porteous, Seguin, Senn, Shaver, Simpson (*Simcoe North*), Smith (*Victoria-Carleton*), Stewart (*Lethbridge*), Stirling, Taylor, Totzke, Tummon, Vallance, Weese, Weir (*Medford*), Weir (*Macdonald*)—38.

The committee proceeded to the consideration of Bill No. 53, an Act to amend the Canada Grain Act.

Dr. W. T. Grindley, Chief of Agricultural Statistics Branch—Called, examined and retired.

Mr. R. T. Jackson, Wheat Buyer Co-operative Wholesale Society Montreal—Called, examined and retired.

In attendance, Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners, Winnipeg; Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners, Winnipeg.

Ordered that the President of the Saskatchewan Wheat Pool and Mr. John B. Fisher, Scottish Co-operative Wholesale Society, Winnipeg, be heard on Tuesday next, May 29.

On motion of Mr. Davies it was *resolved* that the information upon which the Co-operative Wholesale Society base their reasons for the exclusion of Garnet Wheat from Number Two Northern be submitted in a brief to this committee.

The committee adjourned until Tuesday, May 29, at 11 a.m.

WALTER HILL,

Clerk of the Committee.



# MINUTES OF EVIDENCE

HOUSE OF COMMONS,

ROOM 429,

May 22, 1934.

The select standing committee on agriculture met at 11 o'clock, Mr. Senn presiding.

The CHAIRMAN: Gentlemen, come to order, please. We are ready to commence this morning's work. It was understood at our last meeting that we would have as our witnesses to-day Dr. Grindley and a representative of the English Co-operative Society. I am glad to say they are both here. We will hear Dr. Grindley first. His statement refers specifically to questions 3 and 4 of the suggestions of the committee. Dr. Grindley has some statements and these will be distributed among the members.

## QUANTITIES OF NO. 2 NORTHERN IN CANADIAN WHEAT CARRY-OVER AT JULY 31, 1930-33

The following summary table shows the total carry-over of Canadian wheat in Canada at July 31, 1930-1933, inclusive, and the amount and percentage of this on which the grading statistics are available:—

	1930	1931	1932	1933
	bushels	bushels	bushels	bushels
(1) Total carry-over of Canadian wheat in Canada...	111,094,912	134,078,963	131,844,806	211,740,188
(2) Total quantity of wheat on which grades are known.....	68,716,599	105,204,096	112,129,718	187,176,928
(3) Percentage of total on which grades are known (2) (— X 100).....	61·8	78·5	85·0	88·4
(4) Amount of No. 2 Northern in (2).....	15,770,801	26,798,252	44,147,850	30,392,663
(5) Percentage of No. 2 Northern in (2).....	23·0	25·5	39·4	16·2

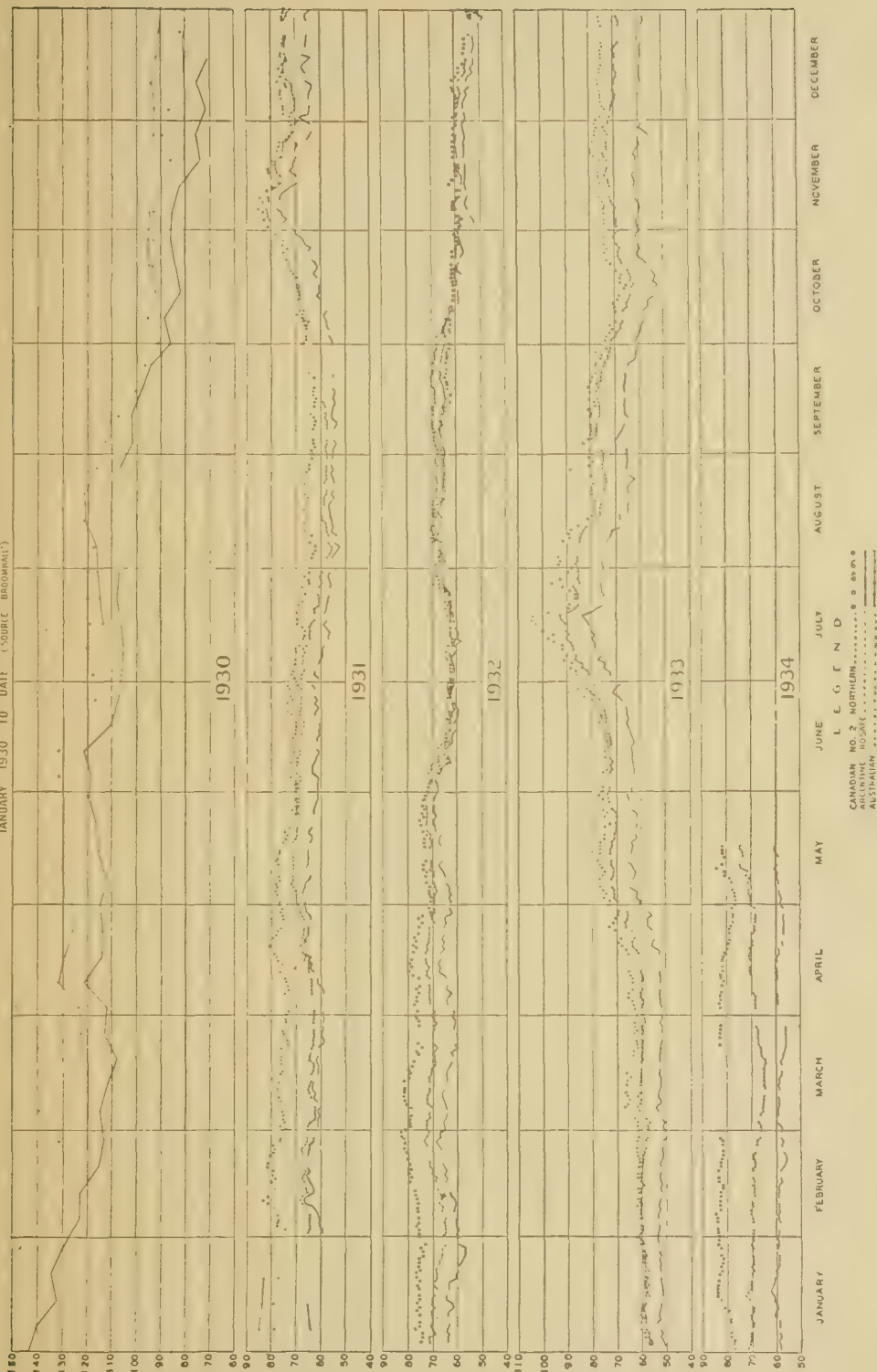
In more detail, by position, the total quantities of wheat on which the grades are known, the quantities of No. 2 Northern and the percentages of No. 2 Northern in the totals are as follows:—

July 31	Total quantities all wheat	No. 2 Manitoba Northern	Percentage of No. 2 Northern in totals
	bushels	bushels	bushels
1930			
Fort William-Port Arthur.....	36,746,147	7,933,149	21·6
Vancouver, New Westminster and Victoria.....	7,652,353	2,387,535	31·2
Interior Public Terminals.....	2,808,006	769,832	27·4
Eastern Elevators.....	21,510,093	4,680,285	21·8
Totals.....	68,716,599	15,770,801	23·0



July 31	Total quantities all wheat	No. 2 Manitoba Northern	Percentage of No. 2 Northern in totals
	bushels	bushels	bushels
1931			
Fort William-Port Arthur.....	45,701,835	12,226,142	26.8
Pacific Coast Terminals.....	9,583,311	2,947,600	30.8
Interior Public Terminals.....	1,424,986	450,554	31.6
Private Terminals, Mills and Country Elevators.....	34,149,352	8,467,161	24.8
Eastern Elevators.....	14,344,612	2,706,795	18.9
Totals.....	105,204,096	26,798,252	25.5
1932			
Fort William-Port Arthur.....	48,683,128	18,734,303	40.1
Pacific Coast Terminals.....	9,705,288	3,283,415	33.8
Churchill.....	2,290,508	1,304,690	57.0
Interior Public Terminals.....	102,412	20,790	20.3
Private Terminals, Mills and Country Elevators.....	33,508,492	12,191,181	36.4
Eastern Elevators.....	17,839,890	8,613,471	48.3
Totals.....	112,129,718	44,147,850	39.4
1933			
Fort William-Port Arthur.....	61,361,463	3,480,307	5.7
Pacific Coast Terminals.....	9,354,528	2,850,870	30.5
Churchill.....	2,430,283	971,944	40.0
Interior Public and Semi-Public Terminals.....	2,003,654	509,167	25.4
Private Terminals, Mills and Country Elevators.....	77,855,091	18,110,195	23.3
Eastern Elevators.....	34,171,909	4,470,180	13.1
Totals.....	187,176,928	30,392,663	16.2

C.I.F. PRICES OF WHEAT AT LIVERPOOL  
IN CENTS PER BUSHEL OF  
CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE  
JANUARY 1930 TO DATE (SOURCE: BROOMHALL)



Dr. T. W. GRINDLEY, called.

WITNESS: Mr. Chairman, the first question given to me for consideration was the question number 3:—

How does the quantity of number 2 Northern compare with the quantity of other grades in our carry-over during each of the last four years?

The carry-over statements for Canadian wheat in Canada at July 31st of the past few years cover wheat in:

1. Farmers' hand.
2. Country, private and mill elevators.
3. Terminal elevators in the Western Inspection Division.
4. Eastern elevators.
5. Flour mills.
6. In transit.

Of these positions, information on grades covers all but the wheat in farmers' hands, eastern flour mills and in transit. For July 31, 1930, no data are available on the grades of wheat in country and private elevators.

The following summary table shows the total carry-over of Canadian wheat at July 31, 1930-1933, inclusive, and the amount and percentage of this on which the grading statistics are available:—

	1930	1931	1932	1933
	bushels	bushels	bushels	bushels
(1) Total carry-over of Canadian Wheat in Canada ..	111,094,912	134,078,963	131,844,806	211,740,188
(2) Total quantity of Wheat on which Grades are known.....	68,716,599	105,204,096	112,129,718	187,176,928
(3) Percentage of Total on which grades are known ( $\frac{(2)}{(1)} \times 100$ ).....	61.8	78.5	85.0	88.4
(4) Amount of No. 2 Northern in (2).....	15,770,801	26,798,252	44,147,850	30,392,663
(5) Percentage of No. 2 Northern in (2).....	23.0	25.5	39.4	16.2

The figures given in line 5 are the percentages of number 2 Northern in the total quantity of wheat on which the grades are known; not of the total quantity of carry-over.

In more detail, by position, the total quantities of wheat on which the grades are known, the quantities of No. 2 Northern and the percentages of No. 2 Northern in the totals are as follows:—

July 31	Total Quantities, All Wheat	No. 2 Manitoba Northern	Percentage of No. 2 Northern in Totals
1930	bushels	bushels	bushels
Fort William-Port Arthur.....	36,746,147	7,933,149	21.6
Vancouver, New Westminster and Victoria.....	7,652,353	2,387,535	31.2
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Totals.....	68,716,599	15,770,801	23.0

July 31	Total quantities all wheat	No. 2 Manitoba Northern	Percentage of No. 2 Northern in totals
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Pacific Coast Terminals.....	9,583,311	2,947,600	30.8
Interior Public Terminals.....	1,424,986	450,554	31.6
Private Terminals, Mills and Country Elevators.....	34,149,352	8,467,161	24.8
Eastern Elevators.....	14,344,612	2,706,795	18.9
Totals.....	105,204,096	26,798,252	25.5
1932			
Fort William-Port Arthur.....	48,683,128	18,734,303	40.1
Pacific Coast Terminals.....	9,705,288	3,283,415	33.8
Churchill.....	2,290,508	1,304,690	57.0
Interior Public Terminals.....	102,412	20,790	20.3
Private Terminals, Mills and Country Elevators.....	33,508,492	12,191,181	36.4
Eastern Eldvators.....	17,839,890	8,613,471	48.3
Totals.....	112,129,718	44,147,850	39.4
1933			
Fort William-Port Arthur.....	61,361,463	3,480,307	5.7
Pacific Coast Terminals.....	9,354,528	2,850,870	30.5
Churchill.....	2,430,283	971,944	40.0
Interior Public and Semi-Public Terminals.....	2,003,654	509,167	25.4
Private Terminals, Mills and Country Elevators.....	77,855,091	18,110,195	23.3
Eastern Elevators.....	34,171,909	4,470,180	13.1
Totals.....	187,176,928	30,392,663	16.2

#### STOCKS IN FARMERS' HANDS

With regard to the stocks of wheat in farmers' hands at July 31, these are estimated on the basis of returns made by crop correspondents. For the whole of Canada, the amounts in the past four years were as follows:—

	Bushels
July 31, 1930 .. . . .	5,326,000
July 31, 1931 .. . . .	19,459,400
July 31, 1932 .. . . .	7,495,800
July 31, 1933 .. . . .	12,340,000

Some idea of the grading of these amounts can be obtained for the Prairie Provinces by the record of inspections of old crop wheat at primary inspection points during the months of August and September following the date of record (i.e. July 31). For this purpose, the carry-over on farms in the three Prairie Provinces is given separately as follows:—

	Bushels
July 31, 1930 .. . . .	4,365,000
July 31, 1931 .. . . .	17,804,000
July 31, 1932 .. . . .	5,829,000
July 21, 1933 .. . . .	11,026,000

The percentages of No. 2 Northern in the old crop inspections of August and September were as follows:—

	Per Cent
August and September, 1930 .. . . .	36.1
August and September, 1931 .. . . .	29.6
August and September, 1932 .. . . .	35.7
August and September, 1933 .. . . .	24.9



The high proportions are partly due to the fact that Alberta farmers have carried over a larger proportion of their wheat in the past few years. The other provinces have been more affected by the prevailing drought and have necessarily delivered and realized on their crops before the 31st of July.

Since farmers tend to feed the lower grades and deliver the better grades, it is a fair inference that the proportions of No. 2 Northern in the farm carry-overs would be somewhat lower than the percentages given above.

The CHAIRMAN: Do you wish to interrogate Dr. Grindley in regard to this phase of the matter before he goes on to question 4?

*By Hon. Mr. Motherwell:*

Q. What we were trying to get at in this schedule was to see if there was any backing up in the volume of 2 Northern Pacific because of alleged non-demand for it. Has there been a larger carry-over of number 2 Northern at the Pacific than of other grades, or at the Atlantic?—A. If you look at the year 1933, the percentage of 2 Northern in the elevators at Fort William, Port Arthur, and in the eastern elevators was much lower than it usually is, and, again, much lower than it was at the Pacific coast terminals.

Q. Yes, it is 5·7?—A. That is right.

Q. And at the Pacific coast terminals it was 30·5 and at Churchill it was 40 per cent, and so on. Are there any other determining factors in connection with this? Was there a special demand for number 1? There is a relatively small amount of number 1 Northern on the Pacific, is there not?—A. Yes, that is right.

Q. Therefore, there will be a big demand, and it will be at a premium, and it would take us all our time to meet the demand.

The CHAIRMAN: We will ask Dr. Grindley to proceed with his statement on question number 4.

WITNESS: Question number 4: "The Canadian price for number 2 Northern compared with the Argentine and Australian price for similar grade for each of the past four years."

*Question No. 4.*—The Canadian price for No. 2 Northern compared with the Argentine and Australian price for similar grade for each of the past four years.

As you are probably aware, it is practically impossible to secure comparative wheat prices in continuous sequence which are not open to some criticism. Neither Argentina nor Australia has established grades such as exist for Canadian wheat. Argentine wheat is sold mostly by district of origin and weight per bushel, with samples the main guide as to price. Rosafe, with a weight of 63 to 64 pounds, is their best wheat, but only in exceptional seasons could it be called "similar" to our No. 2 Northern. Australian wheat is not graded and is sold on a fair average quality basis by sample. Australian wheats are often listed according to the states in which they are grown. Wheats from the dry lands of West Australia have recently become more prominent and are perhaps among their best milling wheats. No Australian wheat, however, could be said to compare favourably with No. 2 Northern in quality. In fact, the highest quality wheats from Argentina and Australia are usually compared with Canadian grades below No. 2 Northern.

You have a chart showing the c.i.f. prices on three grades of wheat at Liverpool, four grades from January, 1932, on c.i.f. prices were considered of more value than quotations in the different countries. A sequence of spot prices for a definite grade throughout the year cannot be secured for Argentine and Australia.

The series mimeographed and charted consists of c.i.f. prices at Liverpool for early shipments of Canadian No. 2 Northern (Atlantic shipment), Argentine Rosafe, and Australian f.a.q. The data are fragmentary up to February, 1931, and at the best are weekly quotations. There are many gaps, however, so that any true comparison must start from February, 1931. The conversions to Canadian currency were made at current rates of exchange. From January 1, 1932, the No. 2 Northern prices are given for Atlantic and Vancouver shipments separately. This marks the first date when Broomhall quoted them as such. Only the price series for No. 2 Northern Atlantic shipment is charted.

Commenting briefly on the series, there is a noticeable tendency for Southern Hemisphere prices to strengthen in relation to other wheat prices when their active shipping season is over. Their prevailing practice is to ship heavily from about February to August; then their wheat is harder to obtain.

As you will see by reference to the tables and the chart before you, there is a considerable variation in the spreads between these different kinds of wheat. Normally, however, No. 2 Northern sells at the highest level and Argentine Rosafe at the lowest. Australian wheat sometimes sells higher than our No. 2 Northern. Quality is not the only price-determining factor; much depends on the selling policy of the different countries, which varies between seasons of the year and between the years also. For example, since elevator space is limited in Argentina, they are compelled to sell freely after harvest. I have given you detailed prices. I have made some averages on a yearly basis if they would be interesting to you.

In the 11-month period from February to December, 1931, the simple averages of the quotations were:—

	Cents per bushel
No. 2 Northern (Atlantic Shipment) . . . . .	72.8
Argentina Rosafe . . . . .	62.0
Australian . . . . .	66.8

Thus No. 2 Northern had a spread of 6.0 cents per bushel over Australian and 10.8 cents per bushel over Argentina Rosafe.

In the calendar year 1932, the simple averages of the quotations were:—

	Cents per bushel
No. 2 Northern (Atlantic Shipment) . . . . .	68.3
No. 2 (Vancouver Shipment) . . . . .	66.8
Argentina Rosafe . . . . .	62.5
Australian . . . . .	66.1

No. 2 Northern Atlantic had a spread of 1.5 cents over the Vancouver shipments, 2.2 cents over Australian and 5.8 cents over Argentina Rosafe.

No. 2 Northern Vancouver had a spread of 0.7 cent over Australian and 4.3 cents over Argentina Rosafe.

The spreads were much narrower in the last seven months of the year than they were from January to May. Canada had abundant supplies to dispose of at this time and prices were unusually competitive.

In the calendar year 1933, the simple averages of the quotations were:—

	Cents per bushel
No. 2 Northern (Atlantic Shipment) . . . . .	73.3
No. 2 Northern (Vancouver Shipment) . . . . .	70.3
Argentina Rosafe . . . . .	60.5
Australian . . . . .	69.6

No. 2 Northern Atlantic had a spread of 3.0 cents over the Vancouver shipments, 3.7 cents over Australian and 12.8 cents over Argentina Rosafe.

No. 2 Northern Vancouver had a spread of 0.7 cent over Australian and 9.8 cents over Argentina Rosafe.

On almost every market day of the year 1933, Canadian No. 2, Northern was quoted above the best grades of Argentine and Australian wheat, with the spreads widening in the latter part of the year.

In the period from January 1 to May 17, 1934, the simple averages of the quotations were:—

	Cents per bushel
No. 2 Northern (Atlantic Shipment) .. . . .	81.1
No. 2 Northern (Vancouver Shipment) .. . . .	77.1
Argentina Rosafe .. . . .	58.5
Australian .. . . .	69.3

No. 2 Northern Atlantic had a spread of 4.0 cents over the Vancouver shipments, 11.8 cents over Australian, and 22.6 cents over Argentina Rosafe.

No. 2 Northern Vancouver had a spread of 7.8 cents over Australian and 18.6 cents over Argentina Rosafe.

Prices of Canadian wheat have held a high premium over other sorts during the winter and early spring and this premium has narrowed only slightly since the opening of navigation on the St. Lawrence. The low prices of Argentina wheat are largely a reflection of that country's selling policy.

Mr. BROWN: What conclusions are we supposed to draw from these statements?

WITNESS: Well, I would rather not draw any conclusions myself. My object was to give you the raw price data, and if there are any averages which would be useful to the committee I would be very glad to have them calculated for you.

Mr. DAVIES: I wonder if Dr. Grindley would be good enough to state whether he knows what factors might lead overseas buyers to pay a premium on 2 Northern ex Atlantic over Vancouver. I understand the relation of the protein content of 1 Northern wheats which go out of Vancouver as compared with the wheats that go out of the southern plains of Saskatchewan and Manitoba.

WITNESS: I think that is more a question for the exporter; but I do think it is reasonable that the number 2 Atlantic wheats come from the southern plains in greater proportion than the 2 Northern Vancouver shipments and, therefore, would be higher in protein content.

Hon. Mr. MOTHERWELL: And they always have been.

Mr. DAVIES: And should that induce a higher price on number 2 ex Atlantic than number 2 ex Vancouver?

WITNESS: I would think so.

Hon. Mr. MOTHERWELL: I have no doubt that if we had a longer time to study these statements we might get something out of them.

The CHAIRMAN: Dr. Grindley will be available at a later date.

WITNESS: I have a statement here entitled "C.I.F. Prices of Wheat at Liverpool each Wednesday in cents per bushel of Canadian currency at prevailing rates of exchange, January 1930 to January 1931" which I will file with the committee.

C.I.F. PRICES OF WHEAT AT LIVERPOOL EACH WEDNESDAY IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, JANUARY 1930 TO JANUARY 1931.

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1930			
January			
1	-	143.4	-
8	Not quoted	140.2	-
15	Not quoted	132.8	-
22	-	134.4	-
29	-	129.8	147.0
February			
5	-	123.6	-
12	-	123.4	Not quoted
19	-	116.0	Not quoted
26	132.0	113.2	-
March			
5	139.2	115.0	-
12	-	111.8	-
19	-	107.6	122.6
26	-	112.8	122.6
April			
2	-	112.4	123.8
9	Not quoted	121.2	132.0
16	Not quoted	114.6	129.6
23	-	114.0	126.4
30	-	114.8	126.8
May			
7	-	112.4	-
14	Not quoted	115.8	Not quoted
21	Not quoted	116.4	Not quoted
28	-	119.4	-
June			
4	132.0	118.8	-
11	132.0	121.6	Not quoted
18	-	110.8	Not quoted
25	117.0	107.2	-
July			
2	118.2	106.2	-
9	120.0	105.6	-
16	119.4	106.8	114.0
23	120.0	108.0	115.2
30	120.0	107.2	116.4
August			
6	117.6	-	117.0
13	-	-	121.2
20	-	-	121.3
27	-	107.2	116.4
September			
3	-	102.0	112.8
10	107.1	102.3	110.1
17	100.5	98.1	-
24	96.9	94.5	-
October			
1	91.5	86.1	-
8	95.7	88.5	-
15	-	82.6	92.7
22	93.9	-	95.1
29	93.2	86.1	95.6
November			
5	93.3	85.9	95.1
12	-	83.1	-
19	86.1	74.2	-
26	89.7	75.9	93.3



C.I.F. PRICES OF WHEAT AT LIVERPOOL EACH WEDNESDAY IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, JANUARY 1930 TO JANUARY 1931.

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1930			
December			
3.....	87.3	71.8	93.3
10.....	—	75.5	94.1
17.....	82.1	70.7	92.2
24.....	—	—	91.1
31.....	—	62.3	89.9
1931			
January			
7.....	78.4	64.1	85.3
14.....	79.2	65.4	84.0
21.....	77.3	—	83.3
28.....	—	—	—

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1931			
February			
2.....	74	59½	65½
3.....	74½	59½	64½
4.....	77½	60½	64½
5.....	77½	60½	64½
6.....	77	60½	64½
7.....	77½	61½	64½
9.....	79	63½	66
10.....	81½	65½	66½
11.....	83½	66	68½
12.....	81½	65½	66½
13.....	78½	63	65½
14.....	78½	63	66
16.....	80	64½	66½
17.....	78½	65½	67½
18.....	79	66	66½
19.....	79	64½	66
20.....	81½	65½	67½
21.....	81½	66½	68½
23.....	80	65½	67½
24.....	79	65½	67½
25.....	78	64½	67½
26.....	79½	64½	66
27.....	76	63	65½
28.....	76	62½	65½
March			
2.....	76½	61½	65½
3.....	74½	61	64½
4.....	75½	61	62½
5.....	75	60	62½
6.....	75	61	62½
7.....	75	60	62½
9.....	76½	61	63½
10.....	77	63	63½
11.....	77	62½	64½

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1931			
March— <i>Concluded</i>			
12.....	77 $\frac{3}{4}$	63 $\frac{3}{4}$	65 $\frac{1}{2}$
13.....	78 $\frac{1}{2}$	63 $\frac{3}{4}$	64 $\frac{1}{2}$
14.....	77	63	63 $\frac{3}{4}$
16.....	76 $\frac{1}{2}$	61 $\frac{3}{4}$	63 $\frac{3}{4}$
17.....	75 $\frac{1}{2}$	61 $\frac{3}{4}$	63
18.....	75 $\frac{3}{4}$	61 $\frac{1}{2}$	63
19.....	76	61 $\frac{7}{8}$	63
20.....	76	61 $\frac{7}{8}$	64 $\frac{1}{2}$
21.....	76	61 $\frac{3}{4}$	64 $\frac{1}{2}$
23.....	76	61 $\frac{1}{2}$	63 $\frac{1}{2}$
24.....	73 $\frac{3}{4}$	59 $\frac{1}{2}$	63
25.....	73 $\frac{3}{4}$	58 $\frac{3}{4}$	63
26.....	75 $\frac{1}{2}$	59 $\frac{1}{2}$	63
27.....	75 $\frac{1}{2}$	59 $\frac{1}{4}$	63
28.....	75 $\frac{1}{2}$	59 $\frac{1}{2}$	63
30.....	74 $\frac{1}{2}$	59 $\frac{1}{2}$	63
31.....	74	58 $\frac{3}{4}$	63
April			
1.....	74	59 $\frac{1}{2}$	63
2.....	73 $\frac{1}{2}$	58 $\frac{1}{2}$	63
7.....	74 $\frac{1}{2}$	59 $\frac{1}{2}$	63 $\frac{1}{2}$
8.....	73 $\frac{1}{2}$	59 $\frac{1}{2}$	63 $\frac{1}{2}$
9.....	73 $\frac{1}{2}$	60 $\frac{1}{2}$	63 $\frac{1}{2}$
10.....	74	61 $\frac{7}{8}$	63 $\frac{1}{2}$
11.....	74 $\frac{1}{2}$	61 $\frac{1}{2}$	63 $\frac{1}{2}$
13.....	76 $\frac{1}{2}$	63	64 $\frac{1}{2}$
14.....	70 $\frac{3}{4}$	64 $\frac{1}{2}$	64 $\frac{7}{8}$
15.....	75 $\frac{1}{2}$	63 $\frac{3}{4}$	65 $\frac{1}{8}$
16.....	77 $\frac{1}{2}$	65 $\frac{1}{2}$	66 $\frac{1}{2}$
17.....	77 $\frac{3}{4}$	63 $\frac{3}{4}$	66
18.....	78 $\frac{1}{2}$	66 $\frac{1}{4}$	67 $\frac{1}{8}$
20.....	80 $\frac{1}{2}$	68 $\frac{1}{2}$	68 $\frac{1}{2}$
21.....	78 $\frac{7}{8}$	66 $\frac{3}{4}$	66 $\frac{1}{2}$
22.....	79 $\frac{1}{2}$	66	67 $\frac{1}{2}$
23.....	78 $\frac{1}{2}$	65 $\frac{1}{4}$	66 $\frac{7}{8}$
24.....	77 $\frac{1}{2}$	65 $\frac{1}{2}$	66 $\frac{1}{2}$
25.....	76 $\frac{1}{4}$	65 $\frac{1}{4}$	66 $\frac{7}{8}$
27.....	75 $\frac{1}{2}$	64 $\frac{1}{2}$	66 $\frac{1}{2}$
28.....	75 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
29.....	76 $\frac{1}{4}$	66 $\frac{1}{2}$	68 $\frac{1}{2}$
30.....	75 $\frac{1}{2}$	66 $\frac{1}{2}$	68 $\frac{1}{2}$
May			
1.....	76 $\frac{3}{4}$	66 $\frac{7}{8}$	69 $\frac{1}{8}$
2.....	76 $\frac{3}{4}$	66 $\frac{1}{2}$	70
4.....	77 $\frac{3}{4}$	67 $\frac{5}{8}$	70
5.....	78 $\frac{1}{4}$	67 $\frac{7}{8}$	70 $\frac{3}{4}$
6.....	77 $\frac{7}{8}$	66 $\frac{7}{8}$	71 $\frac{3}{4}$
7.....	78 $\frac{1}{4}$	66 $\frac{1}{2}$	72 $\frac{1}{2}$
8.....	76	64 $\frac{1}{2}$	71 $\frac{1}{2}$
9.....	76 $\frac{1}{2}$	64 $\frac{1}{2}$	71 $\frac{1}{2}$
11.....	77	66 $\frac{1}{2}$	71 $\frac{1}{2}$
12.....	77 $\frac{1}{2}$	65 $\frac{1}{2}$	71 $\frac{1}{2}$
13.....	78 $\frac{1}{2}$	65 $\frac{1}{2}$	71 $\frac{1}{2}$
14.....	77 $\frac{3}{4}$	65 $\frac{1}{2}$	71 $\frac{1}{2}$
15.....	76 $\frac{3}{4}$	65 $\frac{1}{4}$	71 $\frac{1}{2}$
16.....	76 $\frac{1}{2}$	65 $\frac{1}{2}$	71 $\frac{1}{2}$
18.....	75 $\frac{1}{4}$	64 $\frac{5}{8}$	71 $\frac{1}{2}$
19.....	74 $\frac{1}{2}$	63 $\frac{7}{8}$	70 $\frac{1}{2}$
20.....	73 $\frac{3}{4}$	63 $\frac{5}{8}$	69 $\frac{3}{4}$
21.....	74 $\frac{1}{2}$	65	69 $\frac{1}{2}$
22.....	72 $\frac{7}{8}$	63 $\frac{7}{8}$	69 $\frac{1}{2}$
26.....	70 $\frac{1}{2}$	63	69 $\frac{1}{2}$
27.....	72 $\frac{1}{2}$	63	70
28.....	70 $\frac{1}{2}$	62 $\frac{1}{4}$	69 $\frac{1}{2}$
29.....	70 $\frac{1}{2}$	62 $\frac{1}{4}$	69 $\frac{1}{2}$
30.....	70 $\frac{1}{2}$	61 $\frac{1}{2}$	69 $\frac{1}{2}$

## DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1931			
June			
1	70 $\frac{1}{4}$	61 $\frac{1}{2}$	69 $\frac{1}{2}$
2	70	61	69 $\frac{1}{8}$
3	70 $\frac{5}{8}$	61	69 $\frac{1}{4}$
4	70	61	68 $\frac{3}{4}$
5	72 $\frac{1}{4}$	61	68 $\frac{3}{8}$
6	73 $\frac{1}{8}$	63	69
8	73 $\frac{1}{4}$	63	69 $\frac{1}{2}$
9	72 $\frac{1}{4}$	62 $\frac{5}{8}$	69 $\frac{1}{4}$
10	71 $\frac{1}{2}$	62	69 $\frac{1}{2}$
11	71 $\frac{1}{8}$	61 $\frac{1}{4}$	68 $\frac{1}{2}$
12	71	61	68 $\frac{3}{4}$
13	72 $\frac{1}{4}$	61	68 $\frac{1}{2}$
15	71 $\frac{7}{8}$	61	68 $\frac{1}{2}$
16	71 $\frac{5}{8}$	61	68 $\frac{3}{8}$
17	70 $\frac{3}{8}$	60	67 $\frac{1}{2}$
18	70 $\frac{1}{4}$	60 $\frac{1}{2}$	67 $\frac{1}{4}$
19	70	60	67
20	70	60 $\frac{1}{2}$	67
22	72 $\frac{1}{4}$	62	68 $\frac{3}{4}$
23	73 $\frac{5}{8}$	62 $\frac{1}{2}$	68 $\frac{3}{4}$
24	72	61	67 $\frac{5}{8}$
25	73 $\frac{1}{8}$	62 $\frac{5}{8}$	68
26	71 $\frac{1}{4}$	61 $\frac{1}{2}$	67 $\frac{1}{2}$
27	72 $\frac{1}{4}$	62	67 $\frac{1}{4}$
29	72 $\frac{5}{8}$	62	67 $\frac{1}{2}$
30	73 $\frac{1}{8}$	63 $\frac{1}{4}$	69 $\frac{1}{8}$
July			
2	70 $\frac{1}{4}$	61	67 $\frac{1}{2}$
3	72	62 $\frac{1}{2}$	67 $\frac{1}{4}$
4	71 $\frac{1}{4}$	62	66 $\frac{3}{4}$
6	70 $\frac{1}{2}$	61	67 $\frac{1}{8}$
7	70 $\frac{1}{2}$	60 $\frac{1}{2}$	67
8	70 $\frac{1}{2}$	59	67
9	70	59 $\frac{1}{2}$	66 $\frac{1}{4}$
10	70	59 $\frac{1}{2}$	67
11	68 $\frac{7}{8}$	58 $\frac{1}{2}$	65 $\frac{1}{2}$
13	67 $\frac{1}{2}$	57	64 $\frac{1}{2}$
14	66 $\frac{3}{4}$	57	64 $\frac{1}{2}$
15	66 $\frac{1}{4}$	56 $\frac{1}{2}$	64 $\frac{1}{2}$
16	67 $\frac{1}{2}$	57 $\frac{1}{2}$	64 $\frac{1}{2}$
17	69 $\frac{1}{2}$	58 $\frac{1}{2}$	63 $\frac{1}{2}$
18	69 $\frac{1}{4}$	57 $\frac{1}{2}$	62 $\frac{1}{2}$
20	69 $\frac{1}{8}$	58 $\frac{1}{2}$	62 $\frac{1}{2}$
21	68 $\frac{1}{4}$	57 $\frac{1}{2}$	62 $\frac{1}{4}$
22	68 $\frac{3}{4}$	57 $\frac{1}{4}$	60
23	67 $\frac{3}{4}$	57	60 $\frac{1}{2}$
24	66 $\frac{7}{8}$	57	60 $\frac{3}{8}$
25	66 $\frac{1}{4}$	56 $\frac{3}{8}$	61
27	63 $\frac{5}{8}$	56	60 $\frac{1}{2}$
28	64 $\frac{1}{8}$	55 $\frac{7}{8}$	59 $\frac{1}{2}$
29	65	56 $\frac{1}{4}$	60
30	66 $\frac{1}{8}$	57	60 $\frac{1}{4}$
31	64 $\frac{3}{4}$	56 $\frac{7}{8}$	59 $\frac{3}{8}$
August			
4	63 $\frac{3}{4}$	55 $\frac{7}{8}$	57 $\frac{3}{4}$
5	63	54 $\frac{3}{8}$	56 $\frac{1}{2}$
6	62	53 $\frac{3}{8}$	55 $\frac{3}{4}$
7	62	52 $\frac{3}{4}$	55 $\frac{1}{2}$
8	64 $\frac{5}{8}$	54 $\frac{1}{2}$	57
10	63 $\frac{5}{8}$	53 $\frac{7}{8}$	57
11	66 $\frac{1}{2}$	55 $\frac{3}{8}$	57 $\frac{3}{4}$
12	65 $\frac{3}{8}$	54 $\frac{3}{4}$	57 $\frac{3}{4}$
13	66	55 $\frac{1}{2}$	57 $\frac{1}{4}$
14	65 $\frac{1}{2}$	55 $\frac{1}{2}$	59 $\frac{1}{2}$
15	65 $\frac{3}{8}$	56 $\frac{1}{4}$	59 $\frac{1}{4}$

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1931			
August—Concluded			
17.....	66 $\frac{1}{2}$	56 $\frac{1}{2}$	59 $\frac{1}{2}$
18.....	65 $\frac{1}{2}$	56 $\frac{1}{2}$	58 $\frac{1}{2}$
19.....	65 $\frac{1}{2}$	55 $\frac{1}{2}$	58 $\frac{1}{2}$
20.....	65 $\frac{1}{2}$	54 $\frac{1}{2}$	58 $\frac{1}{2}$
21.....	66 $\frac{1}{2}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$
22.....	66 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
24.....	66 $\frac{1}{2}$	54 $\frac{1}{2}$	58 $\frac{1}{2}$
25.....	65 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
26.....	65	55 $\frac{1}{2}$	57 $\frac{1}{2}$
27.....	65 $\frac{1}{2}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$
28.....	64 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
29.....	64 $\frac{1}{2}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$
31.....	63 $\frac{1}{2}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$
September			
1.....	63 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
2.....	63 $\frac{1}{2}$	55	58
3.....	62 $\frac{1}{2}$	54 $\frac{1}{2}$	58
4.....	62 $\frac{1}{2}$	53 $\frac{1}{2}$	57 $\frac{1}{2}$
5.....	62 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
8.....	62 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
9.....	62	53 $\frac{1}{2}$	57 $\frac{1}{2}$
10.....	61 $\frac{1}{2}$	53 $\frac{1}{2}$	57 $\frac{1}{2}$
11.....	62 $\frac{1}{2}$	55 $\frac{1}{2}$	58
12.....	63 $\frac{1}{2}$	55 $\frac{1}{2}$	58
14.....	62 $\frac{1}{2}$	54 $\frac{1}{2}$	58
15.....	62	54	59
16.....	61 $\frac{1}{2}$	54 $\frac{1}{2}$	—
17.....	62 $\frac{1}{2}$	54 $\frac{1}{2}$	—
18.....	62 $\frac{1}{2}$	54	—
19.....	62 $\frac{1}{2}$	55	—
22.....	62 $\frac{1}{2}$	55	—
23.....	64	55	63 $\frac{1}{2}$
Not reported for balance of September, owing to irregular quotations of sterling.			
October			
1.....	66 $\frac{1}{2}$	56 $\frac{1}{2}$	67 $\frac{1}{2}$
2.....	65 $\frac{1}{2}$	56 $\frac{1}{2}$	65 $\frac{1}{2}$
3.....	65 $\frac{1}{2}$	57 $\frac{1}{2}$	65 $\frac{1}{2}$
5.....	65 $\frac{1}{2}$	57 $\frac{1}{2}$	65 $\frac{1}{2}$
6.....	66 $\frac{1}{2}$	58 $\frac{1}{2}$	65 $\frac{1}{2}$
7.....	66 $\frac{1}{2}$	58 $\frac{1}{2}$	64 $\frac{1}{2}$
8.....	67 $\frac{1}{2}$	58	—
9.....	67	58 $\frac{1}{2}$	69 $\frac{1}{2}$
10.....	66 $\frac{1}{2}$	57 $\frac{1}{2}$	68 $\frac{1}{2}$
13.....	68 $\frac{1}{2}$	60	68 $\frac{1}{2}$
14.....	68 $\frac{1}{2}$	61 $\frac{1}{2}$	68 $\frac{1}{2}$
15.....	68 $\frac{1}{2}$	60 $\frac{1}{2}$	68 $\frac{1}{2}$
16.....	68 $\frac{1}{2}$	60 $\frac{1}{2}$	69 $\frac{1}{2}$
17.....	68 $\frac{1}{2}$	60 $\frac{1}{2}$	69 $\frac{1}{2}$
19.....	69 $\frac{1}{2}$	61 $\frac{1}{2}$	70 $\frac{1}{2}$
20.....	71 $\frac{1}{2}$	62 $\frac{1}{2}$	—
21.....	72 $\frac{1}{2}$	62	—
22.....	72 $\frac{1}{2}$	61 $\frac{1}{2}$	—
23.....	72 $\frac{1}{2}$	62	—
24.....	73 $\frac{1}{2}$	63 $\frac{1}{2}$	—
26.....	75 $\frac{1}{2}$	65	—
27.....	73 $\frac{1}{2}$	65 $\frac{1}{2}$	—
28.....	75 $\frac{1}{2}$	66 $\frac{1}{2}$	—
29.....	75 $\frac{1}{2}$	67	—
30.....	77	67 $\frac{1}{2}$	—
31.....	80	70	—
November			
2.....	81 $\frac{1}{2}$	71 $\frac{1}{2}$	—
3.....	—	75 $\frac{1}{2}$	—
4.....	83 $\frac{1}{2}$	73 $\frac{1}{2}$	80 $\frac{1}{2}$
5.....	84 $\frac{1}{2}$	75 $\frac{1}{2}$	81 $\frac{1}{2}$



## DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern	Argentine Rosafe	Australian
1931			
November—Concluded			
6.....	83 <sup>3</sup> / <sub>4</sub>	75 <sup>7</sup> / <sub>8</sub>	81 <sup>1</sup> / <sub>2</sub>
7.....	85 <sup>5</sup> / <sub>8</sub>	77 <sup>1</sup> / <sub>2</sub>	81 <sup>1</sup> / <sub>2</sub>
9.....	83 <sup>1</sup> / <sub>2</sub>	76 <sup>3</sup> / <sub>4</sub>	81 <sup>1</sup> / <sub>2</sub>
10.....	85	76 <sup>3</sup> / <sub>4</sub>	81 <sup>5</sup> / <sub>8</sub>
12.....	81 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	79 <sup>1</sup> / <sub>2</sub>
13.....	79 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	78 <sup>3</sup> / <sub>4</sub>
14.....	77 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>	76 <sup>5</sup> / <sub>8</sub>
16.....	76 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>	76 <sup>1</sup> / <sub>2</sub>
17.....	81 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>2</sub>
18.....	81 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>2</sub>
19.....	79 <sup>1</sup> / <sub>2</sub>	70 <sup>1</sup> / <sub>4</sub>	78
20.....	79 <sup>1</sup> / <sub>2</sub>	70 <sup>1</sup> / <sub>4</sub>	78 <sup>1</sup> / <sub>2</sub>
21.....	76 <sup>3</sup> / <sub>4</sub>	69 <sup>1</sup> / <sub>2</sub>	76 <sup>1</sup> / <sub>2</sub>
23.....	77 <sup>1</sup> / <sub>2</sub>	70 <sup>1</sup> / <sub>4</sub>	76 <sup>1</sup> / <sub>2</sub>
24.....	76 <sup>1</sup> / <sub>2</sub>	69	75 <sup>1</sup> / <sub>2</sub>
25.....	76 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>4</sub>	75 <sup>1</sup> / <sub>2</sub>
26.....	73 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>4</sub>
27.....	72 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	72
28.....	71 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	71 <sup>1</sup> / <sub>4</sub>
30.....	71 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	70
December			
1.....	72 <sup>1</sup> / <sub>4</sub>	65 <sup>5</sup> / <sub>8</sub>	68 <sup>5</sup> / <sub>8</sub>
2.....	80	68 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>
3.....	75 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	71
4.....	75	64 <sup>3</sup> / <sub>8</sub>	70
5.....	75	64 <sup>3</sup> / <sub>8</sub>	70 <sup>1</sup> / <sub>2</sub>
7.....	76 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	70 <sup>1</sup> / <sub>2</sub>
8.....	76 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	71
9.....	76 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	71 <sup>5</sup> / <sub>8</sub>
10.....	73 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	71 <sup>5</sup> / <sub>8</sub>
11.....	74	63 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>2</sub>
12.....	77	65 <sup>1</sup> / <sub>4</sub>	74 <sup>3</sup> / <sub>8</sub>
14.....	76 <sup>3</sup> / <sub>4</sub>	65 <sup>3</sup> / <sub>4</sub>	75 <sup>1</sup> / <sub>4</sub>
15.....	76	66 <sup>3</sup> / <sub>4</sub>	75 <sup>3</sup> / <sub>8</sub>
16.....	77 <sup>3</sup> / <sub>8</sub>	67	76 <sup>3</sup> / <sub>8</sub>
17.....	75 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	74
18.....	74 <sup>1</sup> / <sub>2</sub>	64	72 <sup>3</sup> / <sub>8</sub>
19.....	76 <sup>1</sup> / <sub>2</sub>	67	74 <sup>3</sup> / <sub>4</sub>
21.....	76 <sup>1</sup> / <sub>2</sub>	65 <sup>5</sup> / <sub>8</sub>	74 <sup>3</sup> / <sub>4</sub>
22.....	75	65 <sup>3</sup> / <sub>4</sub>	75
23.....	75 <sup>1</sup> / <sub>2</sub>	65 <sup>5</sup> / <sub>8</sub>	75
24.....	74 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	74 <sup>1</sup> / <sub>2</sub>
28.....	75 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>4</sub>	74 <sup>3</sup> / <sub>8</sub>
29.....	75 <sup>1</sup> / <sub>2</sub>	66	75 <sup>1</sup> / <sub>4</sub>
30.....	75 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>
31.....	74 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	71 <sup>1</sup> / <sub>2</sub>

	Canadian No. 2 Northern Atlantic*	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1932				
January				
4.....	75	73 <sup>1</sup> / <sub>2</sub>	64	71 <sup>1</sup> / <sub>2</sub>
5.....	74 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	64	71 <sup>1</sup> / <sub>2</sub>
6.....	74 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>
7.....	77	74 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	70
8.....	76 <sup>1</sup> / <sub>4</sub>	74 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>8</sub>	70 <sup>3</sup> / <sub>4</sub>
9.....	76 <sup>1</sup> / <sub>2</sub>	73	63 <sup>3</sup> / <sub>8</sub>	70 <sup>3</sup> / <sub>4</sub>
11.....	75 <sup>3</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>8</sub>	70
12.....	76	73 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>8</sub>	70 <sup>1</sup> / <sub>2</sub>
13.....	75 <sup>1</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>8</sub>	69 <sup>1</sup> / <sub>2</sub>
14.....	76 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>8</sub>	70 <sup>1</sup> / <sub>2</sub>

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1932				
January—Concluded				
15.....	75 <sup>3</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>8</sub>	64 <sup>5</sup> / <sub>8</sub>	70 <sup>1</sup> / <sub>4</sub>
16.....	75 <sup>3</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>8</sub>	64 <sup>5</sup> / <sub>8</sub>	69 <sup>3</sup> / <sub>8</sub>
18.....	75 <sup>1</sup> / <sub>2</sub>	71 <sup>3</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>8</sub>	68 <sup>7</sup> / <sub>8</sub>
19.....	76 <sup>1</sup> / <sub>2</sub>	72 <sup>7</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>8</sub>	68 <sup>1</sup> / <sub>2</sub>
20.....	75 <sup>5</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	68 <sup>1</sup> / <sub>2</sub>
21.....	76 <sup>3</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>8</sub>	68 <sup>3</sup> / <sub>4</sub>
22.....	76 <sup>1</sup> / <sub>2</sub>	72	60 <sup>3</sup> / <sub>8</sub>	68 <sup>1</sup> / <sub>2</sub>
23.....	75 <sup>5</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	68 <sup>1</sup> / <sub>2</sub>
25.....	75 <sup>1</sup> / <sub>4</sub>	70 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	67 <sup>1</sup> / <sub>2</sub>
26.....	75 <sup>5</sup> / <sub>8</sub>	70 <sup>1</sup> / <sub>2</sub>	58 <sup>1</sup> / <sub>2</sub>	67 <sup>1</sup> / <sub>2</sub>
27.....	74 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>	57 <sup>3</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>4</sub>
28.....	74 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	66 <sup>3</sup> / <sub>4</sub>
29.....	74 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>2</sub>
30.....	74 <sup>1</sup> / <sub>2</sub>	71	59 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>8</sub>
February				
1.....	75 <sup>3</sup> / <sub>8</sub>	71	59 <sup>1</sup> / <sub>2</sub>	66 <sup>3</sup> / <sub>4</sub>
2.....	75 <sup>3</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>8</sub>	60	66 <sup>3</sup> / <sub>8</sub>
3.....	75 <sup>5</sup> / <sub>8</sub>	72	59 <sup>1</sup> / <sub>2</sub>	66
4.....	76	72	60 <sup>1</sup> / <sub>2</sub>	66
5.....	75 <sup>3</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>8</sub>	60	66 <sup>3</sup> / <sub>4</sub>
6.....	75 <sup>5</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>8</sub>	60	66 <sup>1</sup> / <sub>2</sub>
8.....	76	73	61 <sup>1</sup> / <sub>2</sub>	67 <sup>3</sup> / <sub>8</sub>
9.....	76	74	61 <sup>3</sup> / <sub>8</sub>	67 <sup>1</sup> / <sub>2</sub>
10.....	76	74	61 <sup>3</sup> / <sub>8</sub>	68 <sup>3</sup> / <sub>8</sub>
11.....	76 <sup>1</sup> / <sub>2</sub>	74	61 <sup>1</sup> / <sub>2</sub>	67 <sup>3</sup> / <sub>4</sub>
12.....	77	74 <sup>3</sup> / <sub>8</sub>	62	67 <sup>3</sup> / <sub>8</sub>
13.....	77	74 <sup>3</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	68 <sup>3</sup> / <sub>4</sub>
15.....	79 <sup>7</sup> / <sub>8</sub>	77 <sup>1</sup> / <sub>8</sub>	65 <sup>3</sup> / <sub>8</sub>	69 <sup>3</sup> / <sub>8</sub>
16.....	78	76 <sup>3</sup> / <sub>4</sub>	64	69
17.....	79 <sup>7</sup> / <sub>8</sub>	77	65 <sup>1</sup> / <sub>2</sub>	70
18.....	78	77	64	70 <sup>1</sup> / <sub>2</sub>
19.....	79 <sup>7</sup> / <sub>8</sub>	77 <sup>3</sup> / <sub>4</sub>	65 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>8</sub>
20.....	80 <sup>3</sup> / <sub>8</sub>	78	66 <sup>1</sup> / <sub>2</sub>	70 <sup>3</sup> / <sub>8</sub>
22.....	80 <sup>3</sup> / <sub>8</sub>	78	—	—
23.....	81 <sup>1</sup> / <sub>2</sub>	79 <sup>1</sup> / <sub>2</sub>	66 <sup>3</sup> / <sub>8</sub>	—
24.....	81	78 <sup>5</sup> / <sub>8</sub>	67 <sup>1</sup> / <sub>2</sub>	—
25.....	81 <sup>3</sup> / <sub>4</sub>	79 <sup>1</sup> / <sub>2</sub>	67 <sup>1</sup> / <sub>2</sub>	72 <sup>3</sup> / <sub>8</sub>
26.....	82 <sup>1</sup> / <sub>4</sub>	79 <sup>1</sup> / <sub>2</sub>	67 <sup>3</sup> / <sub>8</sub>	73
27.....	81 <sup>1</sup> / <sub>2</sub>	79	66 <sup>3</sup> / <sub>8</sub>	72 <sup>5</sup> / <sub>8</sub>
29.....	81 <sup>1</sup> / <sub>2</sub>	79 <sup>3</sup> / <sub>8</sub>	66 <sup>3</sup> / <sub>8</sub>	72 <sup>5</sup> / <sub>8</sub>
March				
1.....	80 <sup>1</sup> / <sub>2</sub>	78 <sup>5</sup> / <sub>8</sub>	65 <sup>7</sup> / <sub>8</sub>	72 <sup>5</sup> / <sub>8</sub>
2.....	79 <sup>1</sup> / <sub>2</sub>	78	65 <sup>3</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>8</sub>
3.....	79 <sup>1</sup> / <sub>2</sub>	78 <sup>5</sup> / <sub>8</sub>	65	72 <sup>3</sup> / <sub>8</sub>
4.....	79 <sup>1</sup> / <sub>2</sub>	78 <sup>5</sup> / <sub>8</sub>	64 <sup>5</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>4</sub>
5.....	79	78 <sup>1</sup> / <sub>2</sub>	64	71
7.....	79 <sup>1</sup> / <sub>2</sub>	78 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	70 <sup>5</sup> / <sub>8</sub>
8.....	80 <sup>3</sup> / <sub>8</sub>	80	65	72
9.....	81 <sup>3</sup> / <sub>8</sub>	79 <sup>1</sup> / <sub>2</sub>	65 <sup>5</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>4</sub>
10.....	82	80	66	72 <sup>3</sup> / <sub>8</sub>
11.....	81 <sup>5</sup> / <sub>8</sub>	—	66	71 <sup>1</sup> / <sub>2</sub>
12.....	81 <sup>1</sup> / <sub>2</sub>	78 <sup>1</sup> / <sub>2</sub>	65 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>2</sub>
14.....	81 <sup>1</sup> / <sub>2</sub>	78 <sup>5</sup> / <sub>8</sub>	64 <sup>3</sup> / <sub>4</sub>	71 <sup>7</sup> / <sub>8</sub>
15.....	79 <sup>3</sup> / <sub>8</sub>	77 <sup>5</sup> / <sub>8</sub>	64 <sup>5</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>4</sub>
16.....	79 <sup>1</sup> / <sub>2</sub>	76 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	70 <sup>3</sup> / <sub>8</sub>
17.....	79 <sup>1</sup> / <sub>4</sub>	76 <sup>1</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>2</sub>	70 <sup>3</sup> / <sub>8</sub>
18.....	78	76 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>
19.....	77	74 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>4</sub>	69 <sup>1</sup> / <sub>2</sub>
21.....	75 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	62	69 <sup>1</sup> / <sub>2</sub>
22.....	76 <sup>1</sup> / <sub>2</sub>	74	62 <sup>5</sup> / <sub>8</sub>	69 <sup>1</sup> / <sub>2</sub>
23.....	74 <sup>1</sup> / <sub>2</sub>	72	59 <sup>1</sup> / <sub>2</sub>	68
24.....	76	73 <sup>1</sup> / <sub>4</sub>	61 <sup>1</sup> / <sub>2</sub>	69 <sup>1</sup> / <sub>2</sub>
29.....	75 <sup>1</sup> / <sub>2</sub>	72	61 <sup>5</sup> / <sub>8</sub>	69 <sup>5</sup> / <sub>8</sub>
30.....	75	72 <sup>1</sup> / <sub>2</sub>	60	68
31.....	76 <sup>3</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>8</sub>	61	69 <sup>7</sup> / <sub>8</sub>

## DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1932				
April				
1	76 $\frac{3}{4}$	73 $\frac{1}{8}$	62	70 $\frac{5}{8}$
2	75 $\frac{1}{8}$	72 $\frac{3}{4}$	61 $\frac{3}{8}$	69 $\frac{1}{8}$
4	77	74 $\frac{1}{2}$	63 $\frac{3}{8}$	71 $\frac{1}{8}$
5	76 $\frac{3}{8}$	74 $\frac{1}{2}$	64 $\frac{1}{8}$	71 $\frac{1}{8}$
6	76 $\frac{1}{8}$	73 $\frac{1}{2}$	63 $\frac{1}{8}$	71 $\frac{1}{8}$
7	75 $\frac{3}{4}$	73 $\frac{1}{2}$	62 $\frac{1}{8}$	71 $\frac{1}{8}$
8	76 $\frac{3}{8}$	73 $\frac{7}{8}$	64 $\frac{1}{8}$	71 $\frac{1}{8}$
9	76 $\frac{1}{8}$	73 $\frac{3}{8}$	64	71 $\frac{1}{8}$
11	76 $\frac{1}{2}$	73 $\frac{3}{8}$	64 $\frac{3}{8}$	71 $\frac{1}{8}$
12	78 $\frac{3}{4}$	75 $\frac{1}{2}$	65 $\frac{5}{8}$	72 $\frac{1}{8}$
13	79 $\frac{1}{8}$	76 $\frac{1}{8}$	67	72 $\frac{1}{8}$
14	78 $\frac{3}{8}$	75 $\frac{1}{8}$	66 $\frac{5}{8}$	71 $\frac{1}{2}$
15	79	75 $\frac{1}{8}$	67	72 $\frac{1}{8}$
16	78 $\frac{1}{8}$	75 $\frac{1}{2}$	66 $\frac{3}{8}$	72 $\frac{1}{8}$
18	77 $\frac{3}{8}$	74 $\frac{1}{2}$	67 $\frac{1}{8}$	73
19	76 $\frac{3}{4}$	74	65 $\frac{1}{8}$	72 $\frac{1}{8}$
20	77 $\frac{3}{8}$	74 $\frac{1}{2}$	66	72 $\frac{1}{8}$
21	76 $\frac{3}{8}$	73 $\frac{1}{2}$	65	71 $\frac{1}{8}$
22	77	74 $\frac{1}{2}$	66	71 $\frac{1}{8}$
23	75 $\frac{3}{4}$	73 $\frac{1}{2}$	65	71 $\frac{1}{8}$
25	75 $\frac{1}{2}$	73 $\frac{1}{2}$	65 $\frac{1}{8}$	71 $\frac{1}{8}$
26	74 $\frac{5}{8}$	73 $\frac{1}{8}$	64 $\frac{1}{2}$	69
27	75 $\frac{1}{8}$	74	64	70 $\frac{1}{8}$
28	74 $\frac{3}{8}$	72 $\frac{1}{2}$	64 $\frac{1}{8}$	70 $\frac{1}{8}$
29	71	70 $\frac{1}{8}$	62 $\frac{1}{2}$	69 $\frac{1}{8}$
30	71 $\frac{1}{8}$	70 $\frac{3}{8}$	63 $\frac{1}{2}$	69 $\frac{1}{8}$
May				
2	70 $\frac{1}{4}$	69 $\frac{5}{8}$	62 $\frac{3}{8}$	69 $\frac{3}{8}$
3	70 $\frac{7}{8}$	70 $\frac{1}{2}$	63 $\frac{1}{2}$	69 $\frac{1}{8}$
4	71	69 $\frac{7}{8}$	62 $\frac{1}{2}$	69 $\frac{1}{8}$
5	71 $\frac{1}{2}$	—	63 $\frac{3}{8}$	69 $\frac{1}{8}$
6	71	—	63	68 $\frac{1}{8}$
7	72 $\frac{1}{4}$	—	64 $\frac{1}{2}$	69 $\frac{1}{8}$
9	72 $\frac{5}{8}$	—	64	70
10	72 $\frac{1}{8}$	—	65	69 $\frac{1}{2}$
11	73 $\frac{1}{2}$	—	66 $\frac{1}{2}$	71
12	73 $\frac{3}{4}$	72 $\frac{3}{4}$	67 $\frac{1}{2}$	70 $\frac{1}{2}$
13	72 $\frac{1}{2}$	71 $\frac{1}{4}$	65 $\frac{3}{8}$	70 $\frac{1}{4}$
17	73 $\frac{1}{4}$	72	66 $\frac{1}{4}$	71
18	73 $\frac{1}{2}$	72 $\frac{3}{8}$	67 $\frac{1}{2}$	70 $\frac{3}{8}$
19	73 $\frac{1}{4}$	71 $\frac{1}{4}$	67 $\frac{1}{4}$	71 $\frac{1}{8}$
20	72 $\frac{1}{2}$	72	66 $\frac{1}{2}$	70 $\frac{1}{2}$
21	74	72 $\frac{3}{4}$	68 $\frac{1}{4}$	72 $\frac{1}{8}$
23	73 $\frac{3}{4}$	73 $\frac{1}{8}$	68 $\frac{3}{4}$	72 $\frac{1}{2}$
24	75 $\frac{1}{8}$	73 $\frac{1}{2}$	69 $\frac{1}{2}$	72 $\frac{1}{2}$
25	73 $\frac{7}{8}$	72 $\frac{1}{2}$	69 $\frac{1}{2}$	72 $\frac{1}{2}$
26	74	72 $\frac{5}{8}$	68 $\frac{1}{2}$	72 $\frac{5}{8}$
27	74 $\frac{1}{8}$	72 $\frac{1}{2}$	69	72 $\frac{1}{2}$
28	74 $\frac{1}{2}$	72 $\frac{5}{8}$	69 $\frac{3}{8}$	72 $\frac{1}{2}$
30	73	72	69	72 $\frac{5}{8}$
31	72 $\frac{3}{8}$	70 $\frac{7}{8}$	68 $\frac{1}{2}$	72 $\frac{1}{2}$
June				
1	71 $\frac{3}{4}$	70 $\frac{1}{2}$	67 $\frac{7}{8}$	71 $\frac{1}{4}$
2	71 $\frac{1}{2}$	70 $\frac{1}{8}$	67 $\frac{7}{8}$	71 $\frac{1}{4}$
3	70	70 $\frac{1}{4}$	67 $\frac{7}{8}$	71 $\frac{1}{8}$
4	70	69 $\frac{5}{8}$	68 $\frac{5}{8}$	71 $\frac{5}{8}$
6	67 $\frac{1}{2}$	67 $\frac{1}{2}$	67 $\frac{1}{2}$	71 $\frac{1}{2}$
7	66 $\frac{1}{2}$	66 $\frac{1}{2}$	66 $\frac{1}{2}$	70 $\frac{1}{2}$
8	66 $\frac{1}{2}$	65 $\frac{7}{8}$	65 $\frac{7}{8}$	70 $\frac{1}{2}$
9	63 $\frac{1}{2}$	—	62 $\frac{1}{2}$	67 $\frac{1}{2}$
10	63 $\frac{1}{2}$	63 $\frac{1}{2}$	63 $\frac{1}{2}$	67 $\frac{1}{2}$
11	65	63 $\frac{3}{4}$	63 $\frac{3}{4}$	67
13	65 $\frac{1}{2}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
14	64 $\frac{1}{2}$	63 $\frac{5}{8}$	63	65 $\frac{1}{2}$
15	63 $\frac{5}{8}$	63 $\frac{5}{8}$	61 $\frac{5}{8}$	64 $\frac{1}{2}$

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafé	Australian
June—Concluded 1932				
16.....	64 $\frac{3}{4}$	64 $\frac{1}{8}$	62 $\frac{1}{8}$	64 $\frac{3}{4}$
17.....	64 $\frac{5}{8}$	64	62	64 $\frac{3}{8}$
18.....	63	62 $\frac{3}{8}$	60 $\frac{3}{8}$	63
20.....	63 $\frac{5}{8}$	63	61	63
21.....	64	63 $\frac{3}{8}$	60 $\frac{1}{2}$	63 $\frac{3}{8}$
22.....	63 $\frac{1}{8}$	62 $\frac{1}{2}$	59 $\frac{1}{2}$	62 $\frac{1}{2}$
23.....	63 $\frac{1}{8}$	62 $\frac{1}{2}$	59 $\frac{1}{2}$	62 $\frac{1}{8}$
24.....	63 $\frac{1}{2}$	62 $\frac{1}{2}$	59 $\frac{1}{2}$	61 $\frac{1}{2}$
25.....	63 $\frac{1}{2}$	62 $\frac{1}{2}$	60 $\frac{1}{2}$	61 $\frac{1}{4}$
27.....	63 $\frac{5}{8}$	62 $\frac{3}{4}$	63 $\frac{3}{8}$	62 $\frac{1}{8}$
28.....	62	62 $\frac{3}{8}$	63	61 $\frac{3}{4}$
29.....	63	62 $\frac{3}{8}$	63 $\frac{1}{2}$	62 $\frac{3}{8}$
30.....	62 $\frac{3}{4}$	62 $\frac{1}{8}$	63 $\frac{1}{8}$	62 $\frac{3}{8}$
July				
1.....	62 $\frac{3}{4}$	62 $\frac{1}{8}$	63	61 $\frac{3}{4}$
2.....	62 $\frac{3}{8}$	61 $\frac{1}{2}$	61 $\frac{7}{8}$	61 $\frac{1}{2}$
4.....	62 $\frac{1}{2}$	61 $\frac{3}{8}$	61	61 $\frac{3}{8}$
5.....	62 $\frac{1}{8}$	61 $\frac{1}{2}$	61 $\frac{1}{2}$	61 $\frac{1}{4}$
6.....	62 $\frac{1}{4}$	60 $\frac{7}{8}$	61 $\frac{1}{2}$	61 $\frac{3}{8}$
7.....	63 $\frac{3}{8}$	62 $\frac{1}{2}$	62 $\frac{1}{2}$	61 $\frac{5}{8}$
8.....	64	62 $\frac{5}{8}$	62 $\frac{3}{8}$	61 $\frac{3}{8}$
9.....	64	62 $\frac{3}{8}$	63 $\frac{1}{4}$	60 $\frac{3}{4}$
11.....	63 $\frac{1}{4}$	61 $\frac{1}{2}$	62 $\frac{1}{2}$	60
12.....	61 $\frac{1}{2}$	60 $\frac{7}{8}$	61 $\frac{1}{2}$	58 $\frac{7}{8}$
13.....	61 $\frac{3}{8}$	60 $\frac{7}{8}$	60 $\frac{1}{2}$	59 $\frac{3}{4}$
14.....	62	61	62	59
15.....	62 $\frac{1}{8}$	61	62 $\frac{1}{2}$	59 $\frac{7}{8}$
16.....	62 $\frac{7}{8}$	62 $\frac{1}{8}$	62	60 $\frac{5}{8}$
18.....	63 $\frac{3}{8}$	62 $\frac{3}{8}$	62	61 $\frac{1}{4}$
19.....	63	61 $\frac{1}{2}$	62 $\frac{3}{8}$	61 $\frac{1}{4}$
20.....	61 $\frac{3}{8}$	61 $\frac{1}{2}$	62 $\frac{3}{8}$	62
21.....	64	62 $\frac{1}{2}$	62	62 $\frac{1}{8}$
22.....	63 $\frac{3}{8}$	61 $\frac{3}{8}$	62 $\frac{1}{4}$	61 $\frac{3}{8}$
23.....	64 $\frac{1}{2}$	62 $\frac{3}{8}$	63	63
25.....	64 $\frac{7}{8}$	63 $\frac{5}{8}$	62 $\frac{5}{8}$	63 $\frac{5}{8}$
26.....	64	64 $\frac{1}{2}$	63	64
27.....	67	65 $\frac{1}{2}$	64 $\frac{1}{2}$	65 $\frac{3}{4}$
28.....	69 $\frac{1}{4}$	67 $\frac{3}{8}$	65 $\frac{1}{2}$	67 $\frac{3}{8}$
29.....	69 $\frac{7}{8}$	68	66	67 $\frac{3}{8}$
30.....	68 $\frac{5}{8}$	67	65 $\frac{1}{2}$	68
August				
2.....	68 $\frac{1}{8}$	66 $\frac{1}{2}$	65	68 $\frac{1}{8}$
3.....	66	64 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
4.....	66 $\frac{1}{2}$	64 $\frac{1}{2}$	65 $\frac{1}{4}$	67 $\frac{1}{2}$
5.....	66 $\frac{1}{2}$	65	64	66 $\frac{1}{2}$
6.....	67 $\frac{7}{8}$	66	64 $\frac{3}{8}$	67 $\frac{1}{4}$
8.....	70	68	66	69 $\frac{1}{8}$
9.....	70 $\frac{1}{2}$	69	68	69
10.....	68 $\frac{3}{8}$	67 $\frac{1}{2}$	67 $\frac{7}{8}$	69 $\frac{3}{8}$
11.....	69 $\frac{1}{2}$	68	67 $\frac{3}{8}$	70 $\frac{1}{8}$
12.....	68 $\frac{3}{8}$	68	67	69
13.....	68 $\frac{3}{8}$	68	66	70
15.....	67 $\frac{1}{2}$	67	66 $\frac{1}{2}$	69 $\frac{3}{8}$
16.....	68 $\frac{3}{8}$	68	67 $\frac{1}{4}$	69
17.....	68 $\frac{3}{8}$	67	67 $\frac{1}{2}$	70
18.....	67 $\frac{1}{2}$	66	66	69 $\frac{3}{8}$
19.....	66 $\frac{3}{4}$	66	66	68 $\frac{3}{8}$
20.....	65 $\frac{3}{8}$	64	65 $\frac{3}{8}$	68
22.....	64 $\frac{3}{8}$	63	65	68
23.....	64 $\frac{3}{8}$	63	65 $\frac{1}{2}$	67 $\frac{3}{8}$
24.....	64 $\frac{1}{2}$	—	65 $\frac{1}{2}$	67
25.....	64 $\frac{1}{2}$	63	64 $\frac{1}{2}$	67
26.....	64 $\frac{7}{8}$	64	64 $\frac{7}{8}$	68
27.....	65	64	65	67 $\frac{5}{8}$
29.....	65 $\frac{1}{8}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
30.....	67 $\frac{1}{4}$	66	65 $\frac{1}{2}$	67 $\frac{3}{8}$
31.....	66 $\frac{3}{8}$	66	65 $\frac{1}{2}$	68 $\frac{1}{2}$



## DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafé	Australian
1932				
September				
1	65 $\frac{1}{2}$	65 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
2	65 $\frac{1}{2}$	65 $\frac{1}{2}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
3	66 $\frac{1}{2}$	65 $\frac{1}{2}$	65 $\frac{1}{2}$	68 $\frac{1}{2}$
5	67	67	65 $\frac{1}{2}$	69 $\frac{1}{2}$
6	67	67	65 $\frac{1}{2}$	69 $\frac{1}{2}$
7	67	67 $\frac{1}{2}$	66 $\frac{1}{2}$	69
8	66	65	66	69
9	65	65	66	69
10	66 $\frac{1}{2}$	65 $\frac{1}{2}$	66 $\frac{1}{2}$	69 $\frac{1}{2}$
12	65	65	66	69
13	63	63	65 $\frac{1}{2}$	69
14	64 $\frac{1}{2}$	63	66	69
15	62	61	64	68
16	63	63	65 $\frac{1}{2}$	68
17	62	62 $\frac{1}{2}$	65 $\frac{1}{2}$	68
19	63	62 $\frac{1}{2}$	65 $\frac{1}{2}$	69
20	63 $\frac{1}{2}$	62 $\frac{1}{2}$	64	70
21	63	63	64 $\frac{1}{2}$	70
22	64	65	66 $\frac{1}{2}$	70 $\frac{1}{2}$
23	63	63	65 $\frac{1}{2}$	69
24	63	63 $\frac{1}{2}$	65 $\frac{1}{2}$	69
26	64	63	66	69
27	63	62	64 $\frac{1}{2}$	68 $\frac{1}{2}$
28	63	62 $\frac{1}{2}$	64 $\frac{1}{2}$	68
29	63	62 $\frac{1}{2}$	64 $\frac{1}{2}$	68
30	62	62	64 $\frac{1}{2}$	67 $\frac{1}{2}$
October				
1	62 $\frac{1}{2}$	61 $\frac{3}{4}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
3	63	61 $\frac{3}{4}$	64 $\frac{1}{2}$	67 $\frac{1}{2}$
4	62	61 $\frac{3}{4}$	64 $\frac{1}{2}$	65 $\frac{1}{2}$
5	62	61 $\frac{3}{4}$	64 $\frac{1}{2}$	65 $\frac{1}{2}$
6	62	60 $\frac{3}{4}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$
7	62	60	63 $\frac{1}{2}$	—
8	62	59 $\frac{1}{2}$	63 $\frac{1}{2}$	62 $\frac{1}{2}$
11	61	59 $\frac{1}{2}$	62 $\frac{1}{2}$	61 $\frac{3}{4}$
12	61 $\frac{1}{2}$	59	62 $\frac{1}{2}$	60 $\frac{1}{2}$
13	60	59	—	60 $\frac{1}{2}$
14	60	59	—	60 $\frac{1}{2}$
15	60	59	—	60 $\frac{1}{2}$
17	60	59	—	59 $\frac{1}{2}$
18	60	59	—	59 $\frac{1}{2}$
19	61 $\frac{1}{2}$	59	59 $\frac{1}{2}$	59 $\frac{1}{2}$
20	61 $\frac{1}{2}$	60	59 $\frac{1}{2}$	60 $\frac{1}{2}$
21	61 $\frac{1}{2}$	59	59 $\frac{1}{2}$	60 $\frac{1}{2}$
22	61 $\frac{1}{2}$	59 $\frac{1}{2}$	58 $\frac{1}{2}$	60 $\frac{1}{2}$
24	60 $\frac{1}{2}$	59 $\frac{1}{2}$	58 $\frac{1}{2}$	59 $\frac{1}{2}$
25	60	59	57	59
26	59	57 $\frac{1}{2}$	57	59
27	58	57 $\frac{1}{2}$	57	59
28	59	58	59	59
29	60	58	59	58 $\frac{3}{4}$
31	59 $\frac{1}{2}$	58	—	59 $\frac{3}{4}$
November				
1	59	58	—	58 $\frac{3}{4}$
2	58 $\frac{1}{2}$	57 $\frac{1}{2}$	—	58 $\frac{3}{4}$
3	58 $\frac{1}{2}$	57	52 $\frac{1}{2}$	58
4	57 $\frac{1}{2}$	56	52 $\frac{1}{2}$	58
5	59	58	53 $\frac{1}{2}$	59
7	60 $\frac{1}{2}$	60	55	60
8	60 $\frac{1}{2}$	60 $\frac{1}{2}$	56 $\frac{1}{2}$	60 $\frac{1}{2}$
9	60 $\frac{1}{2}$	60 $\frac{1}{2}$	56 $\frac{1}{2}$	60 $\frac{1}{2}$
10	59 $\frac{1}{2}$	59	55	58 $\frac{1}{2}$
12	59	59	55 $\frac{1}{2}$	58
14	60 $\frac{3}{4}$	61	56 $\frac{3}{4}$	59 $\frac{1}{2}$
15	60 $\frac{1}{2}$	60 $\frac{5}{8}$	56	59 $\frac{1}{2}$

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1932				
November—Concluded				
16.....	59 $\frac{3}{4}$	59 $\frac{3}{4}$	57 $\frac{1}{2}$	59 $\frac{1}{2}$
17.....	59 $\frac{5}{8}$	59 $\frac{5}{8}$	56 $\frac{7}{8}$	58 $\frac{1}{2}$
18.....	59 $\frac{5}{8}$	60	56 $\frac{1}{2}$	58 $\frac{1}{2}$
19.....	59 $\frac{5}{8}$	59 $\frac{5}{8}$	56 $\frac{1}{2}$	58 $\frac{1}{2}$
21.....	60 $\frac{3}{8}$	60 $\frac{3}{8}$	56 $\frac{7}{8}$	59 $\frac{1}{4}$
22.....	60 $\frac{3}{8}$	60 $\frac{3}{8}$	56 $\frac{1}{2}$	59 $\frac{1}{4}$
23.....	60 $\frac{3}{8}$	60 $\frac{3}{8}$	56 $\frac{1}{2}$	59 $\frac{1}{4}$
24.....	60 $\frac{5}{8}$	60	56 $\frac{1}{2}$	59 $\frac{1}{4}$
25.....	59 $\frac{7}{8}$	59 $\frac{1}{2}$	55 $\frac{1}{2}$	59 $\frac{1}{4}$
26.....	60 $\frac{1}{2}$	60 $\frac{1}{2}$	56 $\frac{3}{4}$	59 $\frac{1}{2}$
28.....	60 $\frac{7}{8}$	60 $\frac{1}{2}$	57	60
29.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	57 $\frac{1}{2}$	59 $\frac{1}{2}$
30.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	57 $\frac{1}{2}$	59 $\frac{1}{2}$
December				
1.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	56 $\frac{1}{2}$	59 $\frac{1}{2}$
2.....	60 $\frac{1}{2}$	60 $\frac{1}{2}$	56 $\frac{1}{2}$	59 $\frac{1}{2}$
3.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	56 $\frac{1}{2}$	59 $\frac{1}{2}$
5.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	57	59 $\frac{1}{2}$
6.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	57	58 $\frac{1}{2}$
7.....	59 $\frac{1}{2}$	58 $\frac{1}{2}$	56 $\frac{1}{2}$	58 $\frac{1}{2}$
8.....	59 $\frac{1}{2}$	58 $\frac{1}{2}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$
9.....	60 $\frac{5}{8}$	59 $\frac{1}{2}$	56	58
10.....	60 $\frac{1}{2}$	58 $\frac{7}{8}$	54 $\frac{1}{2}$	58 $\frac{3}{4}$
12.....	60 $\frac{1}{2}$	59 $\frac{1}{2}$	55	58 $\frac{1}{2}$
13.....	59 $\frac{1}{2}$	58 $\frac{1}{2}$	54 $\frac{1}{2}$	57 $\frac{1}{2}$
14.....	58	56 $\frac{7}{8}$	52 $\frac{3}{4}$	56 $\frac{7}{8}$
15.....	58	56 $\frac{7}{8}$	53 $\frac{1}{2}$	56 $\frac{7}{8}$
16.....	56 $\frac{1}{2}$	55 $\frac{1}{2}$	51 $\frac{1}{2}$	55 $\frac{1}{2}$
17.....	54 $\frac{7}{8}$	54 $\frac{1}{2}$	51 $\frac{3}{4}$	55 $\frac{1}{2}$
19.....	56 $\frac{1}{2}$	55 $\frac{3}{4}$	52 $\frac{1}{2}$	56 $\frac{3}{4}$
20.....	55 $\frac{1}{2}$	54 $\frac{1}{2}$	51 $\frac{1}{2}$	55 $\frac{1}{2}$
21.....	55 $\frac{1}{2}$	54 $\frac{1}{2}$	51 $\frac{1}{2}$	55 $\frac{1}{2}$
22.....	55 $\frac{3}{4}$	54 $\frac{1}{2}$	52 $\frac{1}{2}$	55 $\frac{1}{2}$
23.....	54	54 $\frac{1}{2}$	52	54 $\frac{1}{2}$
28.....	53 $\frac{5}{8}$	53	49 $\frac{3}{4}$	54
29.....	54 $\frac{1}{2}$	53 $\frac{1}{2}$	48 $\frac{1}{2}$	54 $\frac{1}{2}$
30.....	55 $\frac{1}{2}$	54 $\frac{1}{2}$	50 $\frac{1}{2}$	54 $\frac{1}{2}$
31.....	55 $\frac{1}{2}$	55 $\frac{1}{2}$	50 $\frac{1}{2}$	55 $\frac{1}{2}$
1933				
January				
3.....	56 $\frac{7}{8}$	56 $\frac{1}{2}$	50 $\frac{1}{2}$	56 $\frac{1}{2}$
4.....	56 $\frac{7}{8}$	56 $\frac{1}{2}$	51 $\frac{1}{2}$	56 $\frac{3}{8}$
5.....	58	57 $\frac{1}{2}$	52 $\frac{1}{2}$	57 $\frac{1}{2}$
6.....	58 $\frac{7}{8}$	57 $\frac{1}{2}$	51 $\frac{3}{4}$	57 $\frac{1}{2}$
7.....	60	58 $\frac{7}{8}$	52 $\frac{7}{8}$	58
9.....	60 $\frac{1}{2}$	59 $\frac{1}{2}$	53 $\frac{1}{2}$	58
10.....	59 $\frac{1}{2}$	59 $\frac{1}{2}$	52 $\frac{1}{2}$	58 $\frac{1}{2}$
11.....	60	60	53 $\frac{1}{2}$	58 $\frac{7}{8}$
12.....	60	59 $\frac{5}{8}$	53	59
13.....	59 $\frac{1}{4}$	58 $\frac{1}{2}$	52 $\frac{3}{4}$	59 $\frac{1}{4}$
14.....	58	58 $\frac{1}{4}$	52 $\frac{1}{2}$	58
16.....	58	57 $\frac{5}{8}$	51 $\frac{3}{4}$	57 $\frac{5}{8}$
17.....	58	57 $\frac{5}{8}$	51 $\frac{3}{4}$	58
18.....	58 $\frac{1}{2}$	57 $\frac{5}{8}$	51 $\frac{3}{4}$	58 $\frac{1}{2}$
19.....	58	57 $\frac{1}{2}$	52	57 $\frac{1}{2}$
20.....	58	58 $\frac{1}{4}$	52 $\frac{1}{2}$	58 $\frac{1}{4}$
21.....	57	58 $\frac{1}{4}$	52 $\frac{1}{2}$	58
23.....	57 $\frac{1}{2}$	57 $\frac{1}{2}$	52 $\frac{1}{2}$	57 $\frac{7}{8}$
24.....	58	58 $\frac{1}{2}$	52	58
25.....	58 $\frac{1}{2}$	58 $\frac{1}{2}$	52	59 $\frac{1}{8}$
26.....	59 $\frac{1}{2}$	58 $\frac{7}{8}$	53	58 $\frac{7}{8}$
27.....	59 $\frac{1}{2}$	57 $\frac{7}{8}$	52	58 $\frac{1}{2}$
28.....	59 $\frac{7}{8}$	58 $\frac{5}{8}$	53 $\frac{1}{2}$	59 $\frac{1}{4}$
30.....	60	59 $\frac{3}{4}$	53 $\frac{1}{2}$	59 $\frac{3}{4}$
31.....	60	59 $\frac{3}{4}$	53 $\frac{1}{2}$	60

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1933				
February				
1	61 <sup>3</sup> / <sub>8</sub>	59 <sup>7</sup> / <sub>8</sub>	54	61 <sup>3</sup> / <sub>8</sub>
2	60 <sup>5</sup> / <sub>8</sub>	58 <sup>7</sup> / <sub>8</sub>	53	60 <sup>1</sup> / <sub>8</sub>
3	60 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>	52 <sup>5</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>
4	60	59 <sup>3</sup> / <sub>8</sub>	52	59 <sup>4</sup> / <sub>8</sub>
6	60	59 <sup>3</sup> / <sub>8</sub>	53	60 <sup>2</sup> / <sub>8</sub>
7	60 <sup>3</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>	53	60 <sup>3</sup> / <sub>8</sub>
8	60	59 <sup>3</sup> / <sub>8</sub>	52	60
9	61 <sup>1</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>8</sub>	53 <sup>1</sup> / <sub>8</sub>	60 <sup>7</sup> / <sub>8</sub>
10	60 <sup>7</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>8</sub>	53	60 <sup>1</sup> / <sub>2</sub>
11	61	59 <sup>3</sup> / <sub>8</sub>	52 <sup>1</sup> / <sub>8</sub>	60
13	60	60 <sup>1</sup> / <sub>8</sub>	52	60 <sup>1</sup> / <sub>2</sub>
14	61 <sup>1</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>8</sub>	52 <sup>3</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>
15	59	58 <sup>7</sup> / <sub>8</sub>	51	59
16	60 <sup>1</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>	52 <sup>1</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>2</sub>
17	61 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>	53	60 <sup>1</sup> / <sub>2</sub>
18	61 <sup>1</sup> / <sub>8</sub>	59	52	60
20	60	58 <sup>1</sup> / <sub>8</sub>	52	60 <sup>1</sup> / <sub>2</sub>
21	60	59	51	59
22	60	59	51	59 <sup>3</sup> / <sub>8</sub>
23	61 <sup>1</sup> / <sub>8</sub>	60	51 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>
24	61	59	51	59
25	61 <sup>3</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>	51	58 <sup>3</sup> / <sub>8</sub>
27	61 <sup>1</sup> / <sub>8</sub>	58 <sup>7</sup> / <sub>8</sub>	50	58 <sup>1</sup> / <sub>2</sub>
28	60	58 <sup>1</sup> / <sub>8</sub>	49 <sup>3</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>
March				
1	61	58 <sup>1</sup> / <sub>8</sub>	50 <sup>1</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>
2	61 <sup>5</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>
3	61 <sup>1</sup> / <sub>8</sub>	58 <sup>7</sup> / <sub>8</sub>	50	56 <sup>3</sup> / <sub>8</sub>
4	63	61 <sup>1</sup> / <sub>8</sub>	52	58
6	—	63	53 <sup>1</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>8</sub>
7	67 <sup>5</sup> / <sub>8</sub>	65	54	61 <sup>5</sup> / <sub>8</sub>
8	66	63	52	60 <sup>1</sup> / <sub>8</sub>
9	65	61 <sup>3</sup> / <sub>8</sub>	52	60
10	66	64	53	61 <sup>1</sup> / <sub>8</sub>
11	67	63 <sup>1</sup> / <sub>8</sub>	53 <sup>1</sup> / <sub>8</sub>	60 <sup>1</sup> / <sub>8</sub>
13	66	63 <sup>1</sup> / <sub>8</sub>	52	60 <sup>1</sup> / <sub>8</sub>
14	66	63 <sup>1</sup> / <sub>8</sub>	52	60 <sup>1</sup> / <sub>8</sub>
15	65	61 <sup>1</sup> / <sub>8</sub>	52	60 <sup>1</sup> / <sub>8</sub>
16	66 <sup>1</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>8</sub>	52	60
17	—	64 <sup>1</sup> / <sub>8</sub>	53	60 <sup>1</sup> / <sub>8</sub>
18	—	62 <sup>1</sup> / <sub>8</sub>	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
20	—	62	52	60
21	63 <sup>5</sup> / <sub>8</sub>	61 <sup>7</sup> / <sub>8</sub>	52 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
22	63	61 <sup>1</sup> / <sub>8</sub>	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
23	61 <sup>1</sup> / <sub>8</sub>	60	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
24	61	60 <sup>3</sup> / <sub>8</sub>	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
25	61	60 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
27	62	60 <sup>7</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
28	61	60	51 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
29	62	60	51 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
30	62	60	52 <sup>1</sup> / <sub>8</sub>	58 <sup>5</sup> / <sub>8</sub>
31	61	59	51 <sup>1</sup> / <sub>8</sub>	58 <sup>3</sup> / <sub>8</sub>
April				
1	62	60 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>8</sub>	59
3	62	61	51	59 <sup>3</sup> / <sub>8</sub>
4	63	61	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
5	63	61	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
6	65	62	52	60 <sup>3</sup> / <sub>8</sub>
7	64 <sup>3</sup> / <sub>8</sub>	62	52	60 <sup>3</sup> / <sub>8</sub>
8	63 <sup>3</sup> / <sub>8</sub>	62	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
10	62 <sup>1</sup> / <sub>8</sub>	61	52	59 <sup>1</sup> / <sub>8</sub>
11	63 <sup>3</sup> / <sub>8</sub>	62	52 <sup>1</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>8</sub>
12	64	63	52 <sup>1</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>
13	64 <sup>3</sup> / <sub>8</sub>	62	52	60 <sup>1</sup> / <sub>8</sub>

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1933				
April—Concluded				
18.....	64 <sup>7</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	52 <sup>7</sup> / <sub>8</sub>	61
19.....	65 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>
20.....	67 <sup>7</sup> / <sub>8</sub>	66 <sup>5</sup> / <sub>8</sub>	55 <sup>5</sup> / <sub>8</sub>	64
21.....	69 <sup>3</sup> / <sub>8</sub>	68 <sup>1</sup> / <sub>2</sub>	55 <sup>5</sup> / <sub>8</sub>	64
22.....	67 <sup>7</sup> / <sub>8</sub>	68 <sup>1</sup> / <sub>2</sub>	54 <sup>5</sup> / <sub>8</sub>	63
24.....	70 <sup>7</sup> / <sub>8</sub>	68 <sup>7</sup> / <sub>8</sub>	55 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>
25.....	72 <sup>7</sup> / <sub>8</sub>	71 <sup>7</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>	67
26.....	71 <sup>1</sup> / <sub>4</sub>	70 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	67 <sup>3</sup> / <sub>8</sub>
27.....	70	69 <sup>3</sup> / <sub>8</sub>	57 <sup>1</sup> / <sub>2</sub>	66 <sup>5</sup> / <sub>8</sub>
28.....	69 <sup>5</sup> / <sub>8</sub>	69	55 <sup>1</sup> / <sub>2</sub>	66
29.....	69 <sup>1</sup> / <sub>8</sub>	68	56 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>2</sub>
May				
1.....	73 <sup>1</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>
2.....	72 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>
3.....	75 <sup>1</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>4</sub>	62	71
4.....	74	72 <sup>1</sup> / <sub>4</sub>	61 <sup>3</sup> / <sub>8</sub>	71
5.....	75 <sup>1</sup> / <sub>4</sub>	74 <sup>1</sup> / <sub>2</sub>	62	71 <sup>1</sup> / <sub>4</sub>
6.....	76 <sup>1</sup> / <sub>8</sub>	76 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>2</sub>	72 <sup>3</sup> / <sub>8</sub>
8.....	76 <sup>1</sup> / <sub>8</sub>	75 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	72 <sup>3</sup> / <sub>8</sub>
9.....	75 <sup>1</sup> / <sub>4</sub>	74 <sup>5</sup> / <sub>8</sub>	62 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>2</sub>
10.....	74 <sup>5</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>4</sub>	62	71 <sup>1</sup> / <sub>8</sub>
11.....	75 <sup>7</sup> / <sub>8</sub>	75	63 <sup>1</sup> / <sub>2</sub>	71 <sup>3</sup> / <sub>4</sub>
12.....	76 <sup>1</sup> / <sub>2</sub>	76 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	72 <sup>3</sup> / <sub>4</sub>
13.....	77 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>2</sub>	65	72 <sup>3</sup> / <sub>4</sub>
15.....	76 <sup>1</sup> / <sub>8</sub>	76 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>8</sub>
16.....	76 <sup>1</sup> / <sub>2</sub>	75 <sup>5</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>8</sub>
17.....	76 <sup>1</sup> / <sub>4</sub>	74 <sup>7</sup> / <sub>8</sub>	63	71 <sup>3</sup> / <sub>8</sub>
18.....	76 <sup>1</sup> / <sub>4</sub>	75 <sup>5</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	71 <sup>3</sup> / <sub>8</sub>
19.....	74 <sup>3</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>4</sub>	70 <sup>1</sup> / <sub>2</sub>
20.....	74 <sup>3</sup> / <sub>8</sub>	74	62	70 <sup>1</sup> / <sub>2</sub>
22.....	74 <sup>1</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>2</sub>	61 <sup>7</sup> / <sub>8</sub>	70
23.....	72	71 <sup>5</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	70
25.....	74 <sup>1</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>2</sub>	61 <sup>1</sup> / <sub>2</sub>	70
26.....	73 <sup>1</sup> / <sub>2</sub>	72 <sup>3</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>2</sub>	70
27.....	75	73 <sup>1</sup> / <sub>2</sub>	63	71 <sup>3</sup> / <sub>4</sub>
29.....	76	75 <sup>3</sup> / <sub>8</sub>	63 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>8</sub>
30.....	75 <sup>3</sup> / <sub>8</sub>	74 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>8</sub>
31.....	76 <sup>1</sup> / <sub>4</sub>	75 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>4</sub>	73 <sup>3</sup> / <sub>8</sub>
June				
1.....	75 <sup>5</sup> / <sub>8</sub>	75	63 <sup>5</sup> / <sub>8</sub>	72 <sup>3</sup> / <sub>4</sub>
2.....	75	74 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>
6.....	75	73 <sup>1</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>
7.....	73 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	62	71 <sup>7</sup> / <sub>8</sub>
8.....	73 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>2</sub>	62	72
9.....	72 <sup>1</sup> / <sub>8</sub>	72 <sup>1</sup> / <sub>2</sub>	62 <sup>1</sup> / <sub>2</sub>	71 <sup>5</sup> / <sub>8</sub>
10.....	74	73	62	72 <sup>5</sup> / <sub>8</sub>
12.....	74 <sup>1</sup> / <sub>2</sub>	73 <sup>3</sup> / <sub>8</sub>	63	73 <sup>1</sup> / <sub>4</sub>
13.....	74 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	63	73 <sup>1</sup> / <sub>6</sub>
14.....	73 <sup>1</sup> / <sub>2</sub>	73	62	72
15.....	73 <sup>1</sup> / <sub>2</sub>	73 <sup>1</sup> / <sub>2</sub>	62	72 <sup>1</sup> / <sub>4</sub>
16.....	74 <sup>1</sup> / <sub>4</sub>	74 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>2</sub>	72 <sup>1</sup> / <sub>9</sub>
17.....	74 <sup>1</sup> / <sub>4</sub>	73 <sup>7</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>2</sub>
19.....	75	74 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	73 <sup>8</sup> / <sub>8</sub>
20.....	76 <sup>7</sup> / <sub>8</sub>	75 <sup>1</sup> / <sub>2</sub>	65 <sup>1</sup> / <sub>2</sub>	74 <sup>6</sup> / <sub>8</sub>
21.....	75 <sup>1</sup> / <sub>8</sub>	74 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	74
22.....	76	75	65	74 <sup>3</sup> / <sub>4</sub>
23.....	76 <sup>1</sup> / <sub>2</sub>	75	65	75
24.....	77 <sup>1</sup> / <sub>2</sub>	76	65	76
26.....	79	77 <sup>1</sup> / <sub>2</sub>	67	76 <sup>7</sup> / <sub>8</sub>
27.....	82 <sup>5</sup> / <sub>8</sub>	80	69 <sup>3</sup> / <sub>2</sub>	79
28.....	89	84 <sup>1</sup> / <sub>2</sub>	71 <sup>1</sup> / <sub>4</sub>	80 <sup>1</sup> / <sub>8</sub>
29.....	84 <sup>3</sup> / <sub>8</sub>	82	70	81
30.....	82	80 <sup>5</sup> / <sub>8</sub>	68 <sup>5</sup> / <sub>8</sub>	78 <sup>3</sup> / <sub>8</sub>



## DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafé	Australian
1933				
July				
3	85 $\frac{3}{8}$	86	72	81
4	86	86	72 $\frac{1}{2}$	81 $\frac{5}{8}$
5	88	87 $\frac{3}{4}$	74 $\frac{1}{2}$	83 $\frac{5}{8}$
6	87 $\frac{3}{4}$	86	73	83 $\frac{1}{2}$
7	91	89 $\frac{3}{4}$	77 $\frac{1}{4}$	86 $\frac{1}{2}$
8	90	88 $\frac{3}{4}$	75 $\frac{1}{2}$	86
10	91 $\frac{5}{8}$	90	78 $\frac{1}{4}$	87 $\frac{1}{2}$
11	91 $\frac{3}{4}$	91	78 $\frac{1}{2}$	87 $\frac{3}{4}$
12	95 $\frac{1}{4}$	93	78 $\frac{3}{4}$	88 $\frac{1}{8}$
13	97 $\frac{1}{2}$	95	80	90
14	95 $\frac{1}{4}$	94	78 $\frac{7}{8}$	89 $\frac{3}{8}$
15	100	98 $\frac{1}{2}$	80 $\frac{1}{2}$	90 $\frac{5}{8}$
17	102 $\frac{1}{4}$	100	81 $\frac{1}{4}$	90 $\frac{5}{8}$
18	104	101 $\frac{1}{2}$	82	92 $\frac{1}{8}$
19	103 $\frac{3}{8}$	100	83 $\frac{1}{2}$	92 $\frac{3}{8}$
20	97	94 $\frac{1}{2}$	79 $\frac{5}{8}$	89 $\frac{1}{8}$
21	89 $\frac{7}{8}$	88	77 $\frac{3}{4}$	86 $\frac{1}{2}$
22	88 $\frac{3}{8}$	87	75 $\frac{3}{4}$	85
24	86	85	76 $\frac{1}{2}$	85 $\frac{3}{8}$
25	86	85	75 $\frac{7}{8}$	85 $\frac{3}{8}$
26	88 $\frac{1}{2}$	—	76 $\frac{1}{2}$	86
27	91 $\frac{7}{8}$	—	76 $\frac{1}{2}$	86 $\frac{5}{8}$
28	96	—	77 $\frac{1}{4}$	84 $\frac{3}{4}$
29	92 $\frac{1}{4}$	—	76	85 $\frac{1}{4}$
31	89 $\frac{1}{4}$	—	76	85 $\frac{3}{4}$
August				
1	87 $\frac{1}{8}$	—	75	85 $\frac{1}{8}$
2	93	—	75 $\frac{5}{8}$	86 $\frac{1}{8}$
3	92 $\frac{3}{8}$	—	75 $\frac{5}{8}$	85 $\frac{5}{8}$
4	93	—	75	85 $\frac{1}{2}$
5	—	—	—	—
7	—	—	—	—
8	91 $\frac{1}{4}$	—	73 $\frac{1}{4}$	84 $\frac{3}{8}$
9	88 $\frac{3}{8}$	—	72 $\frac{3}{8}$	84 $\frac{3}{8}$
10	88 $\frac{1}{4}$	—	71 $\frac{5}{8}$	83 $\frac{1}{2}$
11	87 $\frac{3}{8}$	—	71 $\frac{1}{4}$	83 $\frac{1}{2}$
12	84 $\frac{5}{8}$	—	68 $\frac{7}{8}$	81 $\frac{5}{8}$
14	80 $\frac{5}{8}$	—	68 $\frac{1}{2}$	78 $\frac{3}{8}$
15	79	—	68	76
16	78 $\frac{1}{4}$	—	64 $\frac{1}{4}$	76 $\frac{5}{8}$
17	78 $\frac{1}{4}$	77 $\frac{5}{8}$	64 $\frac{1}{4}$	76 $\frac{5}{8}$
18	78 $\frac{1}{4}$	—	64 $\frac{1}{4}$	76
19	78	—	63 $\frac{7}{8}$	74 $\frac{1}{4}$
21	79 $\frac{1}{8}$	—	64 $\frac{1}{4}$	74 $\frac{3}{4}$
22	78 $\frac{1}{8}$	—	64	74 $\frac{3}{8}$
23	79 $\frac{1}{8}$	—	64 $\frac{1}{8}$	75
24	78	78 $\frac{3}{8}$	63	73 $\frac{1}{2}$
25	77 $\frac{7}{8}$	—	61 $\frac{1}{4}$	73 $\frac{3}{8}$
26	79 $\frac{5}{8}$	—	64 $\frac{1}{4}$	74 $\frac{7}{8}$
28	88	—	65	76
29	80 $\frac{3}{8}$	—	65 $\frac{1}{2}$	76 $\frac{1}{4}$
30	78 $\frac{7}{8}$	—	64 $\frac{5}{8}$	75 $\frac{7}{8}$
31	80	—	64 $\frac{5}{8}$	75 $\frac{5}{8}$
September				
1	79 $\frac{3}{4}$	—	65 $\frac{1}{4}$	75 $\frac{1}{2}$
2	80 $\frac{1}{4}$	—	65 $\frac{3}{8}$	76 $\frac{1}{8}$
4	Figures	not received	—	—
5	82 $\frac{1}{8}$	—	69 $\frac{1}{8}$	79 $\frac{1}{8}$
6	80	—	68	77
7	79 $\frac{3}{4}$	—	67 $\frac{3}{4}$	77
8	79	—	67	77
9	79	—	66 $\frac{3}{4}$	77
11	79	—	64 $\frac{3}{4}$	76 $\frac{1}{2}$
12	79 $\frac{1}{2}$	—	65 $\frac{3}{4}$	76 $\frac{1}{4}$
13	79	—	65 $\frac{3}{4}$	76 $\frac{1}{4}$

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 <sup>v</sup> Northern Vancouver	Argentine Rosafé	Australian
1933				
September—Concluded				
14.....	80 $\frac{1}{2}$	—	65 $\frac{1}{2}$	76 $\frac{1}{2}$
15.....	77 $\frac{1}{2}$	—	65 $\frac{1}{2}$	76 $\frac{1}{2}$
16.....	78	—	65 $\frac{1}{2}$	77
18.....	80	—	65 $\frac{1}{2}$	77 $\frac{1}{2}$
19.....	80 $\frac{1}{2}$	—	65 $\frac{1}{2}$	76 $\frac{1}{2}$
20.....	80 $\frac{1}{2}$	—	66 $\frac{1}{2}$	77 $\frac{1}{2}$
21.....	79 $\frac{1}{2}$	—	65 $\frac{1}{2}$	76 $\frac{1}{2}$
22.....	78 $\frac{1}{2}$	—	65 $\frac{1}{2}$	76 $\frac{1}{2}$
23.....	77 $\frac{1}{2}$	78 $\frac{1}{2}$	65 $\frac{1}{2}$	76 $\frac{1}{2}$
25.....	77 $\frac{1}{2}$	77 $\frac{1}{2}$	64	75 $\frac{1}{2}$
26.....	77 $\frac{1}{2}$	78 $\frac{1}{2}$	64	75
27.....	75 $\frac{3}{4}$	77	61 $\frac{3}{4}$	72 $\frac{3}{4}$
28.....	75	75	61	72 $\frac{3}{4}$
29.....	77 $\frac{1}{2}$	74 $\frac{1}{2}$	61	72
30.....	72 $\frac{1}{2}$	—	60 $\frac{1}{2}$	71 $\frac{1}{2}$
October				
2.....	73 $\frac{1}{2}$	73 $\frac{1}{2}$	61 $\frac{1}{2}$	71
3.....	72 $\frac{1}{2}$	72 $\frac{1}{2}$	60 $\frac{1}{2}$	69 $\frac{7}{8}$
4.....	71 $\frac{1}{2}$	72 $\frac{1}{2}$	59 $\frac{1}{2}$	69 $\frac{1}{2}$
5.....	70 $\frac{1}{2}$	71 $\frac{1}{2}$	59 $\frac{1}{2}$	67 $\frac{1}{2}$
6.....	71 $\frac{1}{2}$	71 $\frac{3}{4}$	59 $\frac{1}{2}$	67 $\frac{1}{2}$
7.....	69 $\frac{1}{2}$	70 $\frac{1}{2}$	58	66 $\frac{1}{2}$
9.....	—	—	—	—
10.....	69 $\frac{1}{2}$	—	58	66
11.....	70	—	56 $\frac{3}{4}$	64 $\frac{7}{8}$
12.....	70 $\frac{1}{2}$	—	56 $\frac{1}{2}$	64 $\frac{1}{2}$
13.....	68 $\frac{7}{8}$	—	55	63 $\frac{5}{8}$
14.....	67 $\frac{1}{2}$	—	53 $\frac{1}{2}$	63 $\frac{1}{2}$
16.....	66 $\frac{1}{2}$	—	53 $\frac{1}{2}$	62 $\frac{1}{2}$
17.....	65 $\frac{3}{4}$	—	52 $\frac{7}{8}$	61 $\frac{5}{8}$
18.....	67 $\frac{1}{2}$	—	54	63 $\frac{1}{2}$
19.....	67 $\frac{1}{2}$	68 $\frac{3}{4}$	53 $\frac{1}{2}$	63
20.....	67 $\frac{1}{2}$	—	53 $\frac{1}{2}$	63 $\frac{1}{2}$
21.....	69 $\frac{1}{2}$	—	55	64 $\frac{1}{4}$
23.....	71 $\frac{1}{2}$	—	57	67
24.....	73 $\frac{1}{2}$	—	58 $\frac{1}{2}$	67 $\frac{1}{2}$
25.....	72 $\frac{1}{2}$	—	60 $\frac{1}{2}$	68 $\frac{1}{2}$
26.....	74 $\frac{1}{2}$	—	60 $\frac{1}{2}$	68
27.....	72 $\frac{1}{2}$	—	59 $\frac{1}{2}$	67 $\frac{1}{2}$
28.....	73 $\frac{1}{2}$	—	60	69
30.....	73	—	61	70 $\frac{1}{4}$
31.....	72 $\frac{1}{2}$	—	60 $\frac{1}{2}$	69 $\frac{1}{2}$
November				
1.....	71 $\frac{1}{2}$	—	59 $\frac{1}{2}$	67 $\frac{1}{4}$
2.....	72 $\frac{1}{2}$	—	60 $\frac{1}{2}$	69 $\frac{1}{2}$
3.....	73 $\frac{1}{2}$	—	—	69 $\frac{7}{8}$
4.....	73 $\frac{1}{2}$	—	60 $\frac{3}{4}$	69 $\frac{1}{2}$
6.....	73 $\frac{7}{8}$	73 $\frac{1}{2}$	60	70
7.....	73 $\frac{3}{4}$	73	59 $\frac{1}{2}$	69 $\frac{1}{2}$
8.....	73 $\frac{3}{4}$	72 $\frac{3}{4}$	59	70 $\frac{1}{4}$
9.....	74 $\frac{1}{2}$	74 $\frac{1}{2}$	60 $\frac{1}{2}$	71 $\frac{1}{2}$
10.....	76	76	61 $\frac{1}{2}$	72
13.....	75 $\frac{1}{2}$	76 $\frac{1}{2}$	61 $\frac{1}{2}$	71 $\frac{1}{2}$
14.....	75 $\frac{3}{4}$	75 $\frac{3}{4}$	61	72
15.....	76 $\frac{1}{2}$	76 $\frac{1}{2}$	61 $\frac{1}{2}$	72 $\frac{1}{2}$
16.....	76 $\frac{1}{2}$	77	62	74 $\frac{1}{2}$
17.....	76 $\frac{1}{2}$	76 $\frac{1}{2}$	61 $\frac{1}{2}$	72 $\frac{1}{2}$
18.....	76 $\frac{5}{8}$	77	60	72 $\frac{5}{8}$
20.....	75 $\frac{7}{8}$	76 $\frac{1}{2}$	60	72 $\frac{3}{4}$
21.....	77 $\frac{3}{4}$	78	60	74 $\frac{1}{2}$
22.....	79 $\frac{1}{4}$	78 $\frac{1}{4}$	62 $\frac{1}{2}$	75
23.....	79	77 $\frac{1}{2}$	60	74 $\frac{1}{2}$
24.....	78 $\frac{1}{2}$	77 $\frac{1}{2}$	59	73 $\frac{1}{2}$
25.....	78 $\frac{1}{4}$	77 $\frac{1}{2}$	59 $\frac{3}{8}$	73 $\frac{3}{8}$

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafé	Australian
1933				
November—Concluded				
27.....	77½	75½	56½	72
28.....	77	75½	57½	72½
29.....	76¾	75½	59	73
30.....	77¼	75½	58	71½
December				
1.....	76¾	74½	—	72
2.....	75½	74½	—	71½
4.....	73¾	71½	—	70½
5.....	74½	72½	—	70½
6.....	75½	74½	—	70½
7.....	75¾	73½	—	69½
8.....	75½	73½	—	69½
9.....	76½	73½	59	70½
11.....	76½	73½	58½	69½
12.....	76½	73	58	69½
13.....	75½	73½	59	68½
14.....	75½	72½	59	68½
15.....	75½	73½	59	69½
16.....	74½	73½	58½	69½
18.....	74½	72½	58	69½
19.....	74½	72½	58	69½
20.....	74½	73½	58½	70
21.....	73½	72½	58	69½
22.....	74	72½	57	67½
27.....	74½	73½	58	67½
28.....	76½	74½	57	67½
29.....	76¾	75½	57	68½
1934				
January				
2.....	77½	75½	58½	71½
3.....	77½	74½	58	70½
4.....	77½	74½	59	70½
5.....	78½	75½	58½	70½
6.....	78½	75½	58½	70½
8.....	78½	75	58	69½
9.....	78½	75½	58½	70½
10.....	78½	75½	58½	70½
11.....	—	76½	60	70½
12.....	79½	77	59½	69½
13.....	81	78½	60	69½
15.....	82½	79	61	71½
16.....	83½	81½	62½	72½
17.....	83½	80	62	71½
18.....	83½	80½	61½	70
19.....	83	79	60	70½
20.....	83	79	60½	70½
22.....	82½	70	60	70½
23.....	82	79	60	69½
24.....	82½	79	59½	70½
25.....	81½	78	59	69½
26.....	81½	78	59	69½
27.....	82½	78	59½	69½
29.....	82½	79	59½	69½
30.....	83	80	59	70½
31.....	83½	80	59½	69
February				
1.....	83½	80½	59½	69½
2.....	83½	79½	58	69½
3.....	83½	80	58	69½
5.....	83½	80½	58	69½
6.....	84	80½	59	69½
7.....	84½	80½	59½	70½
8.....	82½	79	58	70½

DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1934				
February—Concluded				
9.....	82 $\frac{3}{8}$	79	58 $\frac{7}{8}$	69 $\frac{1}{2}$
10.....	82 $\frac{1}{4}$	77 $\frac{7}{8}$	58 $\frac{1}{2}$	69 $\frac{7}{8}$
12.....	82 $\frac{1}{2}$	78 $\frac{1}{4}$	58 $\frac{1}{2}$	69
13.....	82 $\frac{1}{2}$	78 $\frac{1}{8}$	58 $\frac{1}{2}$	69
14.....	81 $\frac{1}{2}$	77 $\frac{7}{8}$	58 $\frac{1}{2}$	69
15.....	81 $\frac{1}{2}$	77	58 $\frac{1}{2}$	69
16.....	83 $\frac{3}{8}$	78	57 $\frac{1}{2}$	69 $\frac{3}{8}$
17.....	83 $\frac{1}{2}$	77 $\frac{1}{2}$	57 $\frac{1}{2}$	70
19.....	83 $\frac{1}{2}$	77 $\frac{1}{2}$	58 $\frac{1}{2}$	69 $\frac{3}{8}$
20.....	82	76 $\frac{3}{4}$	57 $\frac{1}{2}$	68 $\frac{3}{4}$
21.....	82	76 $\frac{1}{2}$	56 $\frac{1}{2}$	68 $\frac{3}{4}$
22.....	82	76	56 $\frac{1}{2}$	70 $\frac{1}{2}$
23.....	81 $\frac{1}{2}$	75 $\frac{7}{8}$	56 $\frac{1}{2}$	69 $\frac{1}{2}$
24.....	81 $\frac{1}{2}$	75 $\frac{3}{4}$	57 $\frac{1}{2}$	68 $\frac{1}{2}$
26.....	81	76 $\frac{1}{8}$	57 $\frac{1}{2}$	67 $\frac{1}{8}$
27.....	81	76 $\frac{1}{2}$	56 $\frac{1}{2}$	67 $\frac{1}{2}$
28.....	82 $\frac{1}{8}$	76 $\frac{1}{2}$	57	66 $\frac{1}{8}$
March				
1.....	—	77 $\frac{1}{4}$	57 $\frac{3}{8}$	66 $\frac{1}{4}$
2.....	—	77 $\frac{1}{4}$	57 $\frac{3}{8}$	66 $\frac{1}{8}$
3.....	—	78 $\frac{1}{8}$	59	67
5.....	—	79 $\frac{1}{2}$	59	66 $\frac{1}{2}$
6.....	—	78 $\frac{7}{8}$	59	65 $\frac{1}{2}$
7.....	—	—	59	65 $\frac{1}{2}$
8.....	—	78 $\frac{1}{8}$	58 $\frac{5}{8}$	65 $\frac{1}{2}$
9.....	—	78 $\frac{1}{2}$	58 $\frac{1}{4}$	66 $\frac{1}{4}$
10.....	—	78 $\frac{1}{2}$	58 $\frac{1}{8}$	66
12.....	—	79 $\frac{1}{8}$	58 $\frac{3}{4}$	65 $\frac{1}{4}$
13.....	—	79 $\frac{1}{8}$	59	66 $\frac{1}{4}$
14.....	—	78 $\frac{1}{4}$	58 $\frac{1}{4}$	66 $\frac{1}{4}$
15.....	—	77 $\frac{3}{4}$	58 $\frac{1}{4}$	66 $\frac{1}{4}$
16.....	—	77 $\frac{3}{4}$	57 $\frac{3}{4}$	66 $\frac{1}{4}$
17.....	—	77 $\frac{3}{4}$	57 $\frac{3}{4}$	66 $\frac{1}{4}$
19.....	—	77	57 $\frac{3}{4}$	65 $\frac{1}{2}$
20.....	—	77	56 $\frac{5}{8}$	65 $\frac{1}{2}$
21.....	—	76 $\frac{7}{8}$	56 $\frac{1}{4}$	67 $\frac{1}{4}$
22.....	—	77 $\frac{1}{4}$	56 $\frac{1}{2}$	67 $\frac{1}{2}$
23.....	—	77 $\frac{1}{4}$	55 $\frac{5}{8}$	67 $\frac{1}{8}$
24.....	82 $\frac{1}{8}$	76 $\frac{5}{8}$	55 $\frac{7}{8}$	67
26.....	82 $\frac{1}{2}$	76 $\frac{1}{2}$	55 $\frac{5}{8}$	67
27.....	82 $\frac{1}{2}$	75 $\frac{1}{2}$	55 $\frac{1}{2}$	67
28.....	82 $\frac{1}{8}$	75 $\frac{3}{4}$	55 $\frac{7}{8}$	67
29.....	82 $\frac{1}{8}$	76 $\frac{1}{8}$	56 $\frac{1}{2}$	68 $\frac{1}{8}$
30.....	—	—	—	—
31.....	—	—	—	—
April				
3.....	82	76 $\frac{3}{8}$	—	68 $\frac{1}{4}$
4.....	82	77 $\frac{1}{8}$	59 $\frac{3}{8}$	68 $\frac{1}{4}$
5.....	82	76	59 $\frac{1}{2}$	68 $\frac{1}{4}$
6.....	82	76	59	68 $\frac{1}{4}$
7.....	82	75 $\frac{7}{8}$	59 $\frac{1}{2}$	69 $\frac{1}{2}$
9.....	81	75 $\frac{1}{2}$	59	—
10.....	81	75 $\frac{3}{8}$	58 $\frac{1}{2}$	—
11.....	82	76	59 $\frac{1}{2}$	—
12.....	82	76	59	70 $\frac{3}{4}$
13.....	81 $\frac{1}{2}$	75 $\frac{3}{8}$	59	70 $\frac{3}{4}$
14.....	81 $\frac{1}{2}$	75	59	70
16.....	81	75 $\frac{3}{8}$	59	70 $\frac{1}{4}$
17.....	81	75	59	71
18.....	80 $\frac{1}{2}$	73 $\frac{3}{4}$	58	70 $\frac{1}{2}$
19.....	79 $\frac{3}{4}$	73 $\frac{1}{2}$	58	70 $\frac{1}{2}$
20.....	79 $\frac{3}{4}$	73 $\frac{1}{2}$	57	69 $\frac{1}{2}$
21.....	78 $\frac{3}{4}$	74	57	69 $\frac{1}{2}$
23.....	78	74 $\frac{1}{8}$	56 $\frac{1}{8}$	69 $\frac{3}{4}$



DAILY C.I.F. PRICES OF WHEAT AT LIVERPOOL IN CENTS PER BUSHEL OF CANADIAN CURRENCY AT PREVAILING RATES OF EXCHANGE, FEBRUARY 1931 TO DATE

(Source—Broomhall)

	Canadian No. 2 Northern Atlantic	Canadian No. 2 Northern Vancouver	Argentine Rosafe	Australian
1934				
April—Concluded				
24.....	79	74 $\frac{1}{4}$	56 $\frac{3}{4}$	68 $\frac{1}{2}$
25.....	78 $\frac{3}{4}$	73 $\frac{3}{4}$	56 $\frac{3}{4}$	68 $\frac{1}{2}$
26.....	77 $\frac{3}{4}$	74 $\frac{1}{4}$	56 $\frac{3}{4}$	68 $\frac{1}{2}$
27.....	77 $\frac{3}{4}$	73 $\frac{3}{4}$	56 $\frac{3}{4}$	68 $\frac{1}{2}$
28.....	77 $\frac{3}{4}$	73 $\frac{3}{4}$	56 $\frac{3}{4}$	68 $\frac{1}{2}$
30.....	77 $\frac{3}{4}$	74	56 $\frac{3}{4}$	68 $\frac{1}{2}$
May				
1.....	76 $\frac{3}{4}$	74	58	70 $\frac{1}{2}$
2.....	76 $\frac{3}{4}$	73 $\frac{1}{4}$	57 $\frac{3}{4}$	70 $\frac{1}{2}$
3.....	76 $\frac{3}{4}$	73 $\frac{3}{4}$	57 $\frac{3}{4}$	70 $\frac{1}{2}$
4.....	76 $\frac{3}{4}$	73 $\frac{3}{4}$	58 $\frac{1}{2}$	71
5.....	77 $\frac{3}{4}$	74 $\frac{5}{8}$	58 $\frac{1}{2}$	71
7.....	77 $\frac{3}{4}$	75	58 $\frac{3}{4}$	71
8.....	78 $\frac{1}{2}$	76 $\frac{1}{4}$	59	70 $\frac{1}{2}$
9.....	80 $\frac{3}{4}$	78 $\frac{3}{4}$	59 $\frac{1}{2}$	72
10.....	80 $\frac{3}{4}$	78 $\frac{3}{4}$	59	71 $\frac{1}{2}$
11.....	83 $\frac{1}{2}$	81 $\frac{3}{4}$	60 $\frac{1}{2}$	74 $\frac{1}{2}$
12.....	81 $\frac{3}{4}$	79 $\frac{3}{4}$	59 $\frac{7}{8}$	74 $\frac{1}{2}$
14.....	80 $\frac{3}{4}$	77 $\frac{3}{4}$	58 $\frac{3}{4}$	73 $\frac{3}{4}$
15.....	81 $\frac{1}{2}$	78 $\frac{1}{2}$	60 $\frac{1}{2}$	73 $\frac{3}{4}$
16.....	81 $\frac{1}{2}$	79	60 $\frac{3}{4}$	74 $\frac{1}{2}$
17.....	81 $\frac{1}{2}$	79 $\frac{3}{4}$	60 $\frac{3}{4}$	74 $\frac{1}{2}$

Witness retired.

The CHAIRMAN: We have with us Mr. Jackson, representing the English Co-operative Society of Montreal and we will ask Mr. Jackson to come forward.

R. T. JACKSON, called.

The CHAIRMAN: What is your occupation?

The WITNESS: I am wheat buyer for the Co-operative Wholesale Society Limited, Montreal and Vancouver. I hope you will pardon me. I have not had much time to get things together, and there is really very little I can say. I am pretty much guided by the comments we receive from the other side regarding the grain that goes out from Canada. If you do not mind I would like to give you a brief outline of who we are. The Co-operative Wholesale Society Limited have seven flour mills located at Manchester, Oldham, Sowerby Bridge, Hull, Dunston, and Silvertown; and the Scottish Co-operative have two mills, one at Leith and the other at Edinburgh. The English Society uses between thirty-five and forty million bushels of wheat per annum. These are rough figures. Various mills take proportions varying from about 80 per cent down to almost nil of Canadian wheat, depending upon relative values, as compared with other wheats. These values are based upon milling qualities of the various grades of Canadian wheat. We buy wheat in all positions—f.o.b. Vancouver and afloat from Vancouver, in store Fort William, C.I.F. bayports, C.I.F. and f.o.b. St. Lawrence and Atlantic seaports.

With regard to what happens to the wheat when it gets over to the other side, we have had complaints from our mill managers of what appears to them to be a lowering of the standards of Manitoba Northern wheats, the presence of

Garnet affecting milling outturns and giving uncertainty as to the strength of their flour. Our millers have verbally expressed themselves as dissatisfied—the promises made two or three years ago by investigators from Canada have not been lived up to. This has not helped the marketing of Canadian wheats, irrespective of grades.

The CHAIRMAN: What promises were made?

The WITNESS: I understand that there were certain representatives from Canada who visited England and interviewed some of the flour mills on the other side and made certain promises in regard to improving the quality of wheat.

Hon. Mr. WEIR: You say it lowers the standard of our Manitoba Northern; does that include 1 and 2?

The WITNESS: All Manitoba wheat.

Hon. Mr. MOTHERWELL: That applies to all grades?

The WITNESS: Every one.

Hon. Mr. MOTHERWELL: Has the quality ever been any higher than it was the last few years?

The WITNESS: I can only be guided, Mr. Chairman, by the reports we have received from the other side, and they would like to have our standards raised to what they seem to think they were getting in years gone by.

Mr. STIRLING: Who were these Canadian representatives?

The CHAIRMAN: The Canadian representatives who made the promises.

The WITNESS: Mr. Chairman, I cannot answer that.

Mr. VALLANCE: I wonder if either the ex-Minister of Agriculture or the present Minister has any knowledge of who they were and at what time they went? Has the Board of Grain Commissioners any knowledge of any such body going over?

Mr. HAMILTON: Mr. Chairman, I do not know what representatives are referred to, but the chairman of the board, Mr. Ramsay, and the secretary did visit the Old Country and the continent in the fall of 1932.

The CHAIRMAN: I believe, gentlemen, that I am guilty of starting this discussion; but I believe it would be wiser to let Mr. Jackson make his statement. I promise not to offend again.

The WITNESS: Reports we have received regarding outturn of Pacific shipments, indicate an extremely heavy percentage of Garnet in 2 Northern—much more so than 2 Northern out of Fort William. Our policy, gentlemen, is the exclusion of Garnet from regular grades of Manitoba wheat. That is my statement.

The CHAIRMAN: Are there any questions?

*By Hon. Mr. Weir:*

Q. In that connection, Mr. Jackson, I understood you to say that you did not find number 2 to be as good a quality from Vancouver as from Fort William, and yet the records show that for twelve months in succession over a period of two crops the spread between number 1 and number 2 in Vancouver is less than between number 1 and number 2 at Fort William, with more Garnet in the Vancouver number 2 than in the Fort William number 2. How do you account for that? Taking it over a period of twelve months in succession and dealing with two crop years the spread between number 1 and number 2 in Vancouver has been less—that is the average spread—than at Fort William. Now, if you are prejudiced against Garnet for reasons that you do not think it is as good a wheat as it is when mixed, how would you account for that? That is a long period and it deals with two crop years; and your estimate of the value of wheat is the

best estimate of what you would pay for?—A. That is right. The value of 2 Northern out of Vancouver is lower than the value of 2 Northern out of the Atlantic or St. Lawrence ports.

Q. And number 1 as well?—A. And number 1 as well.

Q. You see the difference is this: there might be various reasons to account for that, but the objection of your millers is the presence of Garnet in number 2 in large quantities. You have your number 1 Northern practically without Garnet, and number 2 with Garnet; and yet with more Garnet in the number 2 at Vancouver than at Fort William the spread has been less at Vancouver between number 1 and number 2, with more Garnet in number 2, than it has at Fort William, which would not bear out your prejudice against Garnet. I thought, perhaps, the millers would have some other reason.

Mr. LOUCKS: There is a percentage of Garnet in 1 Northern.

Hon. Mr. WEIR: It is the same at both places; the only variable is a greater quantity of Garnet at Vancouver.

Mr. LOUCKS: Does it show a greater quantity of it in number 1 Northern?

Hon. Mr. WEIR: It is a statutory grade—up to 5 per cent.

Mr. BROWN: I submit there might be a variety of reasons for that, and Mr. Jackson is telling us the experience of his own company, and he is bringing forward the direct statement that his company does not look upon the inclusion of Garnet favourably. Now, that is Mr. Jackson's evidence. I submit it is not up to Mr. Jackson to explain these things which may happen because of the attitude of other companies to it. Mr. Jackson is giving us a straight statement that his company does not like Garnet mixed with Manitoba grades. Now, that, gentlemen, is the question we have to consider, and if the evidence of Mr. Jackson is supported by other companies we will have to give consideration to it. But, after all, that is the only question you have to deal with—just to what extent old country millers object to the inclusion of Garnet. I do not think it is fair to ask Mr. Jackson to explain these differences in spreads, which may result from a variety of causes.

*By Mr. Vallance:*

Q. Mr. Jackson, how long have you represented the English Co-operatives here in Canada?—A. I have been with the company since 1913.

Q. Do you do the purchasing for them here in Canada?—A. I do.

Q. In your experience in buying wheat for the English Co-operatives over a period of years are you buying less number 2 to-day than you were, say, ten years ago?—A. I haven't gone back as far as ten years ago, but as an indication of the past three years, in 1934 we have not bought a bushel of 2 Northern, in 1933 we bought 19 per cent of 2 Northern and in 1932 we bought 60½ per cent.

Q. Did I understand you to say when reading your statement at first that the volume that you usually buy in Canada—A. It varies very much with the price. We are buying wheat all over the world. I am only buying wheat as required from Canada. With the price spread being what it is at times it is to our advantage to buy in other places to compete with the rest of the mills.

Q. So that it will be hard for this committee to blame Garnet wheat, shall I say, entirely for the lack of purchasing done by the English millers of 2 Northern, taking into consideration all the other factors, that you mentioned?—A. Not entirely.

Q. But you would say it was a considerable factor, would you?—A. In arriving at the relative value of 2 Northern, the fact that we have to consider a variable content in the 2 Northern does make them figure on a possible maximum content in Garnet.

Q. Would you say, Mr. Jackson, that the actual value for wheat to-day in 2 Northern is lower than it was, say, seven or eight years ago. Are you complaining of the standards not being higher?—A. Yes. I am just more or less representing the complaints I have received from the other side.



Q. When I say you I mean those you represent. They contend now that the standards to-day are not as high as they used to be; is that so?—A. That is what they say.

Q. And would you say that Garnet wheat is responsible, at least to some extent responsible, for that condition?—A. I could not answer that. I am sorry.

Q. That is the question we would like to decide here. What you can definitely state is that they do not like the inclusion of Garnet in our regular grades, and if you can conclude from that anything I think that would be sufficient.

Mr. CARMICHAEL: What would be the controlling consideration in that statement you made there that 62 per cent of 2 Northern was purchased in 1932, 19 per cent in 1933 and none at all in 1934? What is the chief contributing factor that decided you to drop out of 2 Northern entirely this past year? You are a purchaser of the wheat and you stopped buying 2 Northern completely?

Mr. SMITH: Would the comparative prices paid in other countries be a factor?

WITNESS: Yes.

Mr. CARMICHAEL: What I was wondering was why taking the period of the last three years you told us that in 1932 you purchased 62 per cent of 2 Northern from Canada, in 1933 you purchased 19 per cent and in 1934 you did not purchase anything—I was wondering what you would consider the chief factor that decided you to drop number 2 out of your purchases from Canada?

WITNESS: Well, the year is comparatively young as far as 1934 is concerned, and there has not been very much 2 Northern available at the winter ports, so we were buying 1 Northern at the Atlantic ports.

Mr. PERLEY: Do you give a preference to 2 Northern at the Atlantic over 2 Northern at the Pacific?

WITNESS: Not any more than anyone else, but you could not tell by the price relation between one and the other as to why 2 Northern is preferred out of the Atlantic than out of the Pacific. There is a definite spread between one and the other irrespective of the spread between 1 Northern out of the Atlantic and the Pacific. There is a wider spread, I submit, between the 2 Northern than number 1.

*By Mr. Vallance:*

Q. Have you purchased more number 1 this year in percentages than you usually do up to this time?—A. You are asking if I have purchased more wheat this year than last year?

Q. Yes.—A. No, I have not.

Q. Have you purchased more number 1 up to this period than you did last year or the year before?—A. No.

Mr. LUCAS: Have you got the percentages of purchases for 1931, 1932, 1933 and 1934 for number 1 Northern?

WITNESS: No, I have not.

Hon. Mr. MOTHERWELL: May I ask what is the complaint against number 2 Pacific, because it is lower in value, you say, and we have had that complaint for many years. Sometimes it is the other way about. But when you have had the option of buying number 2 Atlantic why didn't you do it? Nobody is forcing you to buy number 2 Pacific; you could buy number 2 Atlantic and a whole lot of other grades?

The WITNESS: Mr. Chairman, I really believe it is the variable content of Manitoba 2 Northern that causes it.



Hon. Mr. MOTHERWELL: You can go to the Atlantic and get it?

WITNESS: Even that will vary.

Hon. Mr. MOTHERWELL: Well, don't buy it at all. This indicates that there are lots of other grades. It is a free country. You can order what you like. If you can get Garnet cheap enough you will use a lot of it.

WITNESS: Are you suggesting that because we are not buying 2 Northern now to stop buying 2 Northern altogether, and if we do not like 1 Northern we should stop buying that as well?

Hon. Mr. MOTHERWELL: I see you do not like any Canadian wheat.

Mr. CARMICHAEL: Do you get around the purchase of 2 Northern by buying more 1 Northern and possibly 3 Northern and 1 Hard and blending those two?

WITNESS: No. If we can buy 2 Northern at a certain spread under 1 Northern we buy it out of the Atlantic. If the spread is narrower than a certain figure we buy 1 Northern. But if the price of 1 Northern or 2 Northern is above a certain figure we naturally fall back on other countries to get our supplies.

Hon. Mr. WEIR: Is it not a fact that the spread has been very narrow in 1933 between number 1 and number 2 which caused you to buy number 1? If there is a difference of 1 cent between number 1 and number 2 you would have a tendency to buy more number 1, would you not?

WITNESS: Yes, in one way, but also there is the tendency to buy more foreign wheat or a less bulky Canadian wheat.

*By Mr. Totzke:*

Q. How do your purchases of Canadian wheat compare as to quantity in recent years?—A. Our society is getting larger all the time and we are buying more wheat.

Q. I mean Canadian wheat?—A. In Canadian wheat it varies. Up until 1932 and 1933 our figures grew larger each year, but since then they have dropped off. It may be just a temporary condition of the market, or it may be a policy of the owners of Canadian wheat being relatively out of line with foreign wheats.

Mr. PERLEY: You said something in respect to the situation in regard to our Canadian standard to the effect that your representatives from the old country thought our standard should be raised. Do you mean they are losing confidence in our Canadian wheat and think we are lowering our standards?—A. Well, that is pretty much for them to answer. What they tell us verbally is that they are dissatisfied and they want our standards raised. They want 1 Northern to be a better 1 Northern than it is, and the same with 2 Northern.

Mr. McKENZIE: Did they give you any basis for their objection. Is it because of Garnet wheat; or did they state any objection?

WITNESS: In 2 Northern they definitely do state the inclusion of Garnet.

*By Mr. Vallance:*

Q. Is it because of the grading system that Canada has that you are demanding of Canada that she raise her grades, or are you demanding of all countries that import wheat into the Mother Country that they raise their standards?—A. I could not answer that.

Q. Well, then, is it not because of the different system of grading. The Argentine is f.a.q.; you cannot raise it. It is fixed and depends on the crop. Australia is pretty much the same. The same is true with Danubian countries. Canada, because of the fact that she grades from 1 to 6 and we define in the Act

what you expect to get, you say you are not getting what you have a right to expect because of the standard set up; is that it?—A. That is what we have been led to believe from correspondence from the other side.

Mr. LOUCKS: Does it not come down to this, that there is too much visible Garnet in number 2?

WITNESS: It simmers down. We do not want Garnet in the regular grades of Manitoba.

The CHAIRMAN: That is definite.

*Hon. Mr. Motherwell:*

Q. Let us see what this simmers down to. How about the complaints in 1926 and 1927 and 1928 when there was no Garnet in 2 Northern? The complaints were much more frequent and louder than they are now?—A. Possibly by these continued complaints during the years you have mentioned we have been able to keep our standards quite high.

Q. There is something in that. I had the pleasure of visiting your mill in Manchester, and a wonderful mill it was, very capably and well conducted. But it wasn't Garnet in those days; there was no Garnet then, and they were howling their heads off about the piebald wheat, the chalky wheat, the white wheat. Do you remember that?—A. Yes.

Q. It is better now than it was then, surely, is it not?—A. It may be better in appearance.

Q. You want it better still. I think we want to give it to you better still if we can. Our desire is to give our British customers the best we can; but we never expect to see the time when there will not be some complaints. I think possibly we should reduce them to a minimum; but if Garnet were taken out, if there wasn't a pickle left, do you think the Pacific twos would be good enough to suit you?—A. Without Garnet I think Pacific twos would be very attractive.

Q. I cannot understand why you buy it and why these spreads are so low?—A. We are buying very little Pacific 2 Northern.

Q. Because the spreads are so narrow you do not buy it; you take number 1. That means there are so many others after it that you cannot buy it?—A. There are many factors.

Q. Yes, there are many factors.

*By Mr. Davies:*

Q. I would like to ask Mr. Jackson a few questions. I think he intimated to the committee that the sales to Great Britain have been dropping off since 1932, did you not?—A. No. I mentioned that we have been gradually increasing our purchases of Canadian wheat up until 1933 or late 1932 and then they began to drop off.

Q. Now, the figures from our Dominion Bureau of Statistics intimate that in the crop year ending July 31, 1933, the United Kingdom bought more wheat from Canada than she did in any other year except one in her history?—A. Yes.

Q. Now, that would seem to be contradictory to your statement.

Mr. TUMMON: Mr. Jackson is speaking only for his own firm.

Mr. LOUCKS: I think Mr. Jackson intimated to us the fact that the business was expanding all the time. He did not say it, but there should be a greater amount of wheat from Canada sent to those mills instead of a decreasing amount when their business is expanding.

*By Mr. Davies:*

Q. Did you get instructions from your overseas office to buy wheat ex Vancouver or ex Atlantic? Do they instruct you where you are to buy it?—A. If I

am in Vancouver I am buying there in competition with someone who is buying in Montreal out of the Atlantic seaport.

Q. What I am getting at is: does your company definitely instruct you as to whether you should buy ex Vancouver or ex Atlantic?—A. Well, that is a rather difficult question to answer, because if I am in Vancouver I would get orders—naturally they are buying somewhere else—if I am getting orders in Vancouver it means that the orders are being sent there rather than to Montreal.

Q. Do you know if your company has been buying more wheat from the Argentine, let us say, since August last; you are acquainted with those figures?—A. I am not acquainted with the figures.

Q. Well, it is the policy of your company, as a general rule, to buy where they can buy cheapest?—A. They want good quality. They buy on a quality value basis.

Q. Is it not a fact, Mr. Jackson, that your company seeks to build up its business in Great Britain; one of its cardinal principles is that it should deliver the goods to the consumer at a very low cost. Price is a very important factor, is it not?—A. Price and quality.

Q. Now, to come back to this point of the difference in spread between 2 ex Vancouver and number 2 ex Atlantic, Mr. Ramsey, the chief commissioner of the Board of Grain Commissioners in 1932, before this committee on Garnet wheat—I am reading from the volume dated Tuesday, April 5, 1932—said this:—

I have found that the European will not go on record telling you what your standards are. That is not his business. He reflects his opinion in the price he offers which, after all, is the proof of the pudding.

Would you say that is a reasonably fair statement?—A. I would say so.

Q. Are we not then entitled to ask you and expect an answer to the question as to why you should be paying more for number 2 ex Vancouver than you are ex Atlantic?—A. Why we should be paying more for 2 Northern ex Vancouver?

Q. Yes.—A. We do not.

Q. Well, the spreads between 1 and 2 ex Vancouver and ex Atlantic differ definitely in favour of Vancouver as indicated by the Minister of Agriculture a short time ago?—A. I had some comparative prices last night. 1 Northern f.o.b. Vancouver, first half of June was quoted at half over July; 2 Northern 1½ under July. Average charges, c.i.f. Liverpool would put 1 Northern at 12½ over July and 2 Northern at 7½ over July. 1 Northern f.o.b. Montreal in the same position first half of June 7½ over July; 2 Northern 5½; c.i.f. Liverpool 12½. 1 Northern and 10½ 2 Northern. In other words, 2 Northern ex Vancouver is quoted c.i.f. Liverpool at approximately 7½ cents over July and by way of Montreal 10½ over July.

Q. These figures that Mr. Jackson submits disagree with the figures submitted from the Bureau of Statistics, do they not, Mr. Weir?

Hon. Mr. WEIR: I do not know unless I check month by month.

*By Mr. Davies:*

Q. Why do you go back to the month of June?—A. I am just taking the next buying position.

*By Mr. Totzke:*

Q. Are you in a position to tell us what the attitude of your mills will be towards Garnet wheat if it were graded separately? Would they use much Garnet wheat as a separate grade owing to the difference in the requirements in milling? Would they require it separately and would they use it that way?—A. I am sorry, Mr. Chairman, I am not in a position to answer that question but, per-



sonally, I believe that Garnet in itself and by itself has very high qualities. It must have high qualities; and that being so there is certain to be use for it somewhere.

*By Mr. Vallance:*

Q. Have you any knowledge whether your company got any of the trial shipment that was sent over some years ago? Did they try it out?—A. I do not know.

Mr. VALLANCE: Mr. Chairman, it seems to me that Mr. Jackson has been a very good witness from his own standpoint, and when he makes the statement that speaking for his own company they prefer to grade Garnet separately I think nothing more can be said. We may argue with Mr. Jackson all we like about Atlantic spreads and Pacific spreads, but those are the facts. With all due respect to Mr. Jackson, I think the committee will agree he has given us his opinion on the question under discussion.

The CHAIRMAN: He has given us the opinion of his society.

Mr. DAVIES: Of course, he has not answered the most important point, namely, why.

Mr. BROWN: He does not know.

Mr. DAVIES: I think this committee is entitled to know why. May I say, Mr. Chairman, that as far as the grain grower is concerned, in dealing with the mill he is in the same position as the hog producer in dealing with the packing house, and surely this committee would not merely accept a blank statement from a packing house proprietor and accept it in its fullness without asking for some explanation as to why they arrive at a certain conclusion. I do not think we should accept a statement from a miller who may stand to benefit financially. I dare say that the milling interests of Great Britain would at the outset stand to benefit financially by the separate grading of Garnet wheat particularly when we view the fact that it would go on the board at the outset at a lower price than the other wheats. Now, the witness has said there was too much variation in those cargoes but the charts that we have before us on the wall actually indicate that there is a greater variation in the cargoes of 2 Northern ex Montreal than there is of 2 Northern ex Vancouver.

The WITNESS: It may possibly be that the variation is in the Garnet itself.

Mr. DAVIES: It may possibly be also, Mr. Jackson, that it is not in the Garnet itself; that it is a characteristic of northern wheat irrespective of what particular kind it is, might it not? All the protein tests seem to indicate that the northern wheat has on the average a lower protein content. May it not be attributable to that rather than to the fact that it is a particular kind of wheat?

The WITNESS: I could not answer that. I would like to give you all the information I can to satisfy you, but I am not in a position to state.

Mr. DAVIES: Could you get a brief from your company as to why they attribute this to Garnet? I think that is a reasonable request, Mr. Chairman. I do not think it is an unreasonable request at all. I think in fairness to the Garnet growers that before anything is done in this direction we are entitled to this information.

Hon. Mr. MOTHERWELL: Quite reasonable.

Mr. PERLEY: I think it would be a reasonable request to make of Mr. Jackson that he should tell us why his company does not like the mixing of Garnet with northern wheat. I think it is unreasonable to ask him or his company to explain all these variations and statistics and to say why they thus and so in view of the infinite number of factors that may enter into the problem; but if Mr. Jackson could tell us the reason why they do not like Garnet included in their mixtures, I think, perhaps, we would be asking a perfectly reasonable ques-



tion. Is it because of the difference in treatment or because they have found difficulty in handling it.

THE WITNESS: Mr. Chairman, I am not in a position to answer that question either. I can only say that there is the presence of a varying quantity of Garnet in what they had been taking as 2 Northern wheat. At one time they were accustomed to receiving a certain milling content of a certain strength for flour making and everything else in 2 Northern, and now they are dubious as to just what 2 Northern will do.

MR. PERLEY: If Garnet were kept out altogether, do you think it would strengthen the position of our 2 Northern on the British market?

WITNESS: I think so.

HON. MR. WEIR: Would you say by a cent a bushel? How many cents a bushel?

WITNESS: It is hard to say.

HON. MR. WEIR: If it would improve the quality one cent a bushel it would not express a very great improvement in quality.

WITNESS: It may not add very much to the relative price of 1 Northern or 2 Northern.

HON. MR. WEIR: I am not talking of that; I am talking of number 2. The question you were asked by Mr. Perley is this: if you take the Garnet out of 2 Northern would it improve the quality of 2 Northern?

WITNESS: I really believe that if 2 Northern had not any Garnet, the difference in price of 2 Northern out of Vancouver and out of Montreal would be the same as the difference between 1 and 2 Northern out of Vancouver and Montreal. It would figure out in that the spread roughly is a cent and an eighth on 1 Northern difference between one and the other, and at the present time it is three and three-eighths in 2 Northern in these two positions. That spread would narrow down considerably.

HON. MR. WEIR: Yes, but for twelve months in succession in two crop periods it did narrow down. Your answer to Mr. Perley was that if Garnet was taken out of 2 Northern it would improve the quality of 2 Northern as far as you are concerned?

WITNESS: It would.

HON. MR. WEIR: If it would improve the quality of 2 Northern at all I would say it would be measured by the price paid for it.

WITNESS: Yes.

HON. MR. WEIR: It would be a reasonable conclusion to come to. Would it increase it say 1 cent?

WITNESS: It might increase more than that.

HON. MR. WEIR: Would you think as a reasonable conclusion that it would increase it 1 cent?

WITNESS: Possibly.

HON. MR. WEIR: I have here the spread between 1 and 2 which is 1 cent. That would mean it would raise No. two to No. one, and yet No. 2 would be an inferior wheat with the Garnet out.

WITNESS: It would raise No. two to No. one, and raise No. one. I have worked on the relative value of 1 and 2 Northern.

HON. MR. WEIR: If it would improve the quality of No. 1 you would pay more for it.

MR. TOTZKE: Is not this the position: the firms represented by Mr. Jackson are good customers of ours. We are trying to please our customers. If these customers say they are not satisfied, is it not our duty to please them?

*By Mr. Davies:*

Q. I want to ask Mr. Jackson another question. Have you got the figures regarding the proportions of No. 1 and No. 2 that you bought in 1932 on the 1932 market?—A. My figures are very indefinite.

Q. Would you mind repeating those figures such as they are?—A. Sixty per cent of the wheat I purchased in 1932 was 2 Northern.

Q. Now, have you any idea as to how much of that went ex Atlantic and how much ex Vancouver; could you give us a rough estimate?—A. Roughly about 15 per cent; probably less than that—between 10 and 15 per cent roughly from Vancouver.

Q. Now, the charts on the wall here indicate that some cargoes going out of Vancouver on that market were as high as 86 per cent Garnet, that the average was 60 per cent Garnet, and the average on number 2 cargoes going ex Fort William was 35 per cent Garnet; so that it was clear in that crop year of 1932 that your company did buy cargoes with considerable quantities of Garnet in them?—A. Yes, we had complaints regarding the outturn of those shipments, particularly out of Prince Rupert.

Q. What I was saying was that your company has been using and has been buying large quantities of number 2 with Garnet in it. Now, if Garnet were graded separately and placed on the board at a considerably lower price than it brings at the present time in number 2, there would be no reason for thinking you would not continue to use Garnet?—A. It would depend on the milling quality—if the milling quality was such and the price was such that it was attractive, and there possibly would not be such a great discount in price. Offhand I could not say.

Q. The point I wish to make is that you have been using large quantities of Garnet, and therefore you have no reason for thinking you would not continue?—A. As a grade by itself, yes.

Q. And being on the board at a considerably lower price your firm would stand to benefit financially considerably, would it not, if they continued to use it at the lower price?—A. If they wish.

Q. And that would be at the expense of the producer of Garnet?—A. The Garnet to my mind, I think, would stand on its own feet. If there was any value to the Garnet it would depend on the demand.

*By Mr. Brown:*

Q. I suppose if your company found you could use Garnet by itself profitably you would use it?—A. Yes.

Q. And other milling companies would do the same?—A. Very quickly.

Q. Would not competition, if Garnet were found to be a good wheat in itself, bring it to its relative value with other wheats?—A. Yes.

Mr. VALLANCE: I would like to refer one question to Mr. Fraser. Mr. Fraser, what percentages of number 3 do you find in Garnet?

Mr. FRASER: I do not believe I could answer that, Mr. Vallance, because we have not made separations; we have not made any tests on number 3.

Mr. VALLANCE: Would it be fair to ask you this question: with the knowledge you have of Garnet wheat grading into number 2 would you say that most of the Garnet wheat grades into number 2?

Mr. FRASER: In years that the harvest is taken off before there is any frost, yes.

Mr. VALLANCE: That would leave number 3 comparatively free of Garnet wheat?

Mr. FRASER: Yes, in years of that kind when the crop comes in early.

Mr. VALLANCE: It would be much more desirable to the miller who wants Garnet eliminaed from his mixture?

Mr. FRASER: Three Northern would be more desirable. Of course, number 3 carries a good many defects that may be objectionable to millers. It probably would be lighter in weight and it would not have the yield of flour. There are a good many things that affect number 3.

Mr. VALLANCE: You would say at least that the major portion of the Garnet wheat goes into number 2?

Mr. FRASER: Yes, I think so.

Mr. VALLANCE: That is the point that we have to clean up.

The CHAIRMAN: Gentlemen, I think we have gone about as far as there is any need of going. The witness has stated his position quite clearly.

Mr. DAVIES: Are we going to ask this witness to submit a brief along the lines suggested?

The CHAIRMAN: I think it is rather difficult to ask an importing company outside of the country to give its reasons in detail, particularly when it is a customer. It would probably do so. If you think it is desirable we will ask them.

Mr. DAVIES: The welfare of many thousands of farmers is wrapped up in this question. I do not think it is an unfair request to make.

The CHAIRMAN: We will ask Mr. Jackson to ask his company to submit their reasons for the statements he makes.

(After discussion)

Mr. DAVIES: I am going to move that we should ask Mr. Jackson to furnish the information suggested. I do not think I am being unreasonable in my request. Mr. Smith who gave evidence at the last meeting of this committee stated that he sold most of his wheat in Europe. Let us bear in mind that we ship more wheat to other parts of the world than we ship to the United Kingdom alone, and Mr. Smith's own evidence as a grain exporter was that he had no complaint respecting Garnet number 2 in Europe, outside of the British Isles. I want Mr. Jackson's firm to submit a brief indicating why and how they arrive at the conclusion that Garnet should be graded separately.

Mr. CARMICHAEL: I have no objections to that motion, except the time element that enters in. It means that the submission will be made to this firm in the old country, they will take it up with their scientific men and they will start in to make their investigations very meticulously and possibly by August or October or November we may have a report.

Mr. DAVIES: That is not a factor. There was one question asked of Mr. Fraser by Mr. Vallance about the quantities of Garnet in number 3 and which he cannot answer. Probably Mr. Newman can answer, and if it is thought desirable I suggest we should ask Mr. Newman while he is here.

Mr. NEWMAN, recalled.

*By Mr. Vallance:*

Q. Mr. Newman, the question I asked Mr. Fraser was: could you tell me what percentage of Garnet was in number 3 Northern? He said he was not in a position to answer that?—A. In this report, a copy of which I sent to Mr. Fraser, and which he, unfortunately, probably has not with him. I find we have these Garnet contents in fifty-five cargoes of 3 Northern from the 1932 crop ex Fort William.

Q. Are you dealing with number 3?—A. 3 Northern only. Here is about the way the cargoes run: 27 per cent Garnet on the average in 3 Northern in



55 cargoes leaving Fort William, as follows—"Canadian" 17·8 per cent. The next boat, 25 per cent, the next boat 21 per cent, the next boat 25 per cent, the next boat 2·9 per cent; 0·3 was the lowest percentage and 66 the highest percentage and one cargo of 3 Northern ex Fort William. The average was 2·7 per cent. Now, it is rather interesting that the fluctuations as between cargoes of 3 Northern leaving Fort William are greater than the fluctuations in the 3 Northern leaving Vancouver. The average percentage Garnet contained in 50 cargoes, also of 3 Northern, leaving Vancouver, referring again to the 1932 crop, was 43·6.

*By Mr. Donnelly:*

Q. Have you anything for number 4?—A. Yes, 33 per cent, but there was a comparatively small number of cargoes.

Q. Was that at Vancouver?—A. Yes.

Q. Have you any from Fort William?—A. No.

*By Mr. Boyes:*

Q. You have already given the percentage of number 2?—A. Yes, of number 2 the average percentage was 35 ex Fort William and 65 ex Vancouver, as against 27 per cent in number 3 ex Atlantic and 43 per cent ex Vancouver.

Mr. Chairman, while I am on my feet might I add a word. I might say that last night I received a copy of *The Miller*, an old country milling paper which included among other things a report of the annual address of the president of the millers' association, Mr. Alexander Dence. He reviews the work of the association in various fields during the year. There is one paragraph here headed "Garnet Wheat" which I might read because I think it probably reflects the feelings of the great majority of the members of that large and powerful association who have given this matter a great deal of consideration, and I think the committee would find this of some value.

*Garnet Wheat:* Little progress has been made in regard to the protest which the committee made more than twelve months ago with regard to the amount of Garnet wheat contained in Manitoba wheat shipped to this country. The chairman of the Board of Grain Commissioners is submitting to the Canadian Parliament certain amendments to the Act containing proposed statutory grades of Garnet wheat. The committee communicated with this gentleman, urging that the matter should be settled before the new standards were made up, as unless this was done, and Manitoba wheats continued to arrive containing such large proportions of Garnet wheat, it would react unfavourably on the marketing of Canadian wheat.

In the discussion, you have raised the question as to whether or not the views expressed by Mr. Jackson were fairly typical of those held by the majority of the old country millers. I would think that the statement made by the president of the association would pretty nearly answer that question.

Now, the question was also asked, Mr. Chairman, as to whether Mr. Jackson's concern participated in the test made in 1929. I may say they did. I was personally with the shipment. We had 7,000 bushels over there milled and baked at 21 different points. The Silvertown mill did some very fine work—that is the mill of the English Co-operative Society—and their conclusions were very much in line with those obtained from the others whose opinions are recorded in my report.



Mr. DAVIES: Mr. Chairman, before we adjourn, I would like to make a correction in a statement of mine on Wednesday, May 16, at page 106, line 11. I am reported as saying:—

There is an area in northern Alberta where the government went in and distributed Garnet wheat fifteen years ago.

What I said was that there was an area in northern Alberta where the government went in and distributed Garnet wheat where fifteen years ago they were unable to grow any other wheat successfully.

The Committee adjourned to meet Tuesday, May 29, at 11 o'clock.















SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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TUESDAY, MAY 29, 1934

No. 7

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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WITNESSES:

Mr. John B. Fisher, Scottish Co-operative Wholesale Society, Winnipeg.  
Mr. L. C. Brouillette, President, Saskatchewan Wheat Pool.  
Mr. E. B. Ramsay, Chief Commissioner, Board of Grain Commissioners,  
of Canada.





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

TUESDAY, May 29th, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon, Mr. Senn, the Chairman, presiding.

*Members Present:* Messieurs. Barber, Blair, Bowen, Boyes, Brown, Burns, Carmichael, Davies, Donnelly, Dupuis, Garland (*Bow River*), Gobeil, Golding, Hall, Loucks, Lucas, McKenzie (*Assiniboia*), Moore (*Chateauguay-Huntingdon*), Motherwell, Mullins, Perley (*Qu'Appelle*), Pickel, Senn, Shaver, Smith, Spotton, Stirling, Swanston, Taylor, Totzke, Vallance, Weese, Weir (*Melfort*), Weir (*Macdonald*), Wilson. (35).

In attendance: Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners; Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

The Chairman read a letter from the English Co-Operative Wholesale Society, see Minutes of Evidence, page 173.

On motion of Mr. Carmichael it was resolved that the evidence to be given by Dr. H. M. Tory, President of the Research Council of Canada, be heard in Camera.

The Committee proceeded to the consideration of Bill 53, an Act to amend the Canada Grain Act.

Mr. Davies presented a questionnaire to be sent to the Co-Operative Wholesale Society, Montreal.

Mr. John B. Fisher, Scottish Co-Operative Wholesale Society of Winnipeg—Called, examined and retired.

Mr. Fred Bowen was requested by the Chairman to take the Chair.

Mr. L. C. Brouillette, President, Saskatchewan Wheat Pool—Called, examined and retired.

Mr. E. B. Ramsay, Chief Commissioner, Board of Grain Commissioners of Canada—Called, examined and retired.

The Committee then adjourned to meet again on Wednesday, May 30th, at 11 a.m.

Walter Hill,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

May 29, 1934.

The Select Standing Committee on Agriculture met at eleven o'clock, Mr. Senn presiding.

The CHAIRMAN: Gentlemen, first of all I want to bring to the attention of the committee, and have it included in the record, a letter which I have received from Mr. W. L. Wieland, representative of the Co-operative Wholesale Society Limited. This is in reply to the request made by the committee as to the reasons for this society condemning Garnet wheat in the way it was referred to at our last meeting by Mr. Jackson.

The CHAIRMAN,  
Select Standing Committee on Agriculture,  
House of Parliament, Ottawa.

DEAR SIR,—In reply to your question to our Mr. Jackson, I give you, herewith, cable received from our Mr. Hobley of Liverpool.

Garnet hard brittle impossible condition milling when mixed with Marquis much better chance mill to advantage when dealt with separately.

I sincerely trust that this information is what you desire and proves of use in your deliberations.

For your information, I should like you to know that while in the United Kingdom last October I was asked by our millers when they could expect results from the previous investigation carried on over there by our government. I was given to understand that they had been promised some form of action and were becoming rather impatient of delay.

I do not wish to impose my opinion too heavily upon you, but it appears to me that the vital question to the welfare of our wheat growers is being ignored and that is why our exports of this grain are dropping.

In all other lines which we buy here for the United Kingdom, it is not a question of what the producer or manufacturer wishes to produce or manufacture—it is what the buyer wants that counts.

There is no sense in trying to impose the opinion of quality held by the seller on the buyer. The buyers know what they want and as I understand this situation regarding Garnet wheat they have demonstrated quite fully some two years ago their desires and the sooner this type of wheat is segregated the better for our country as a whole.

Canada has, in the past, firmly established her western grain certificates as being absolutely reliable. Millers have accepted this certificate with the certainty of knowing what results they could obtain in milling and have paid a good premium over all other imported wheats. Now that they are demanding of us that we re-establish this high reputation of our grain certificates, are we not extremely short sighted that we do not comply at once? We, in Canada, are the ones to suffer, not they—they are in a position to do what they want, but where they want, and mix grains as they please.

I do not feel that I can be too emphatic in these remarks and trust that they are received as proffered, solely in the interests of our Canadian



wheat industry. Give the buyer what he wants and we shall go a long way to re-establish our, until recently, high reputation for wheat throughout all importing countries.

Yours very truly,

W. L. WIELAND.

Mr. BROWN: What is the effect of that cable?

The CHAIRMAN: The writer quotes the cable he received in reply to the question asked at our last meeting in this committee.

Mr. BROWN: Would you read the cable again?

The CHAIRMAN: "Garnet hard brittle impossible condition milling when mixed with Marquis much better chance mill to advantage when dealt with separately."

Another matter which we have to deal with before we hear witnesses this morning is that Dr. Tory is ready to come before us at any time, and we should like to have him to-morrow if possible.

(Discussion followed.)

The CHAIRMAN: Now, gentlemen, we have two witnesses to be heard to-day—John S. Fisher who is head of the Scottish Co-operative Organization of Winnipeg and Mr. Brouillette, the head of the Saskatchewan Wheat Pool. We will hear Mr. Fisher first.

Mr. DAVIES: Mr. Chairman, before your witness is called, I would like to say a word or two with reference to the letter that was filed this morning, because, I presume, we are not dismissing this matter in so summary a fashion. I would like the opportunity as a member of this committee to examine somebody who has some knowledge of the basis of that letter. One would not think of a letter being addressed to a judge of a court being accepted as a statement of fact without some opportunity being given for examination of such a statement, and I would like that opportunity personally—and perhaps some other members of the committee would also—to examine some representative of the C. W. S. Limited who has some knowledge of the matters stated in that letter. This matter is not nearly so well defined or so well settled as Mr. Loucks and some other members of the committee think. I have before me the report of the committee for 1932, and I will read from pages 66 and 67 portions of a letter dated April 1, 1932, from Mr. James Sword, of the Scottish Co-operative Wholesale Society Limited, Glasgow, addressed to Dr. Newman, Dominion Cerealists. It is quite a lengthy letter and, therefore, I shall read only parts of it. He is complaining about our number 2 grade:

On the primary cause I am not prepared to be so dogmatic, but I have very strong suspicions, and tolerably good reasons for concluding, that the trouble begins with the inclusion of certain wheat varieties in number 2 grade which are excluded from number 1.

Later on he says:

It is quite possible that all these results and defects may have no connection with Garnet wheat."

This was from an authoritative purchaser written 1st of April, 1932, and I presume there are some on this committee who hold the view that irrespective of the wheat, grain grown in northern parts is low in protein content, and it may be that whether it happens to be Garnet, Reward or any other wheat you will still have some defect in number 2 as long as you grow wheat in northern parts. The separation of Garnet may not overcome these defects.

It is also a rather significant thing to point out that since this evidence was given before the committee in 1932 the United Kingdom in the crop year 1932-33 imported from this country the largest quantity of wheat in the history of the

country. I made the statement at the last meeting of the committee that it was the largest quantity, I thought, except in one year, but upon checking up the reports of the Dominion Bureau of Statistics I find that during the crop year 1932-33 the United Kingdom imported 103,000,000 bushels, and the comment is that it was the largest importation of that country and about one-half of the total imports of the United Kingdom.

Then, I would also ask the indulgence of the committee if we have an opportunity—and I hope I will have the opportunity to examine a witness in respect to this letter—I would also like the C.W.S. Limited to file an answer to five questions I would like to ask, which I think will at least assist me in coming to some reasonable conclusion on this matter, and the questions are as follows:

1. Total imports from all countries, by countries, by the C.W.S. Limited during each of the Canadian crop years, ending July 31, for crop years 1929-30 to 1932-33 inclusive.

The CHAIRMAN: Now, Mr. Davies, there is a question arises there. I do not know that we have any power to extract that evidence if they do not want to give it, because, after all, they are a British company and not a Canadian company. However, if they will give it well and good.

Mr. DAVIES: I would like to ask these questions anyway:—

2. The above mentioned figures for each country showing imports separated into grades;

3. The figures referred to in number 2 above in so far as Canada is concerned, indicating quantities of each grade ex Atlantic and ex Pacific ports;

4. Amount of purchases of U.K. wheat crop, by Canadian crop years, for crop years 1929-30 to 1932-33 inclusive.

By the C.W.S. Limited.

5. Quantities of flour, if any, milled by C.W.S. Limited mills during each of crop years referred to in number 1, which flour was exported.

For myself, when I have an answer to these questions I will have a very clear indication of where they have been buying their wheat, what they have been doing with it, and the mixes they have been using; and it will certainly assist me very materially in coming to a proper conclusion on this subject.

The CHAIRMAN: Is it the wish of the committee that these questions be submitted to this company? I may say that we will have to ask for the information, and it may not be forthcoming.

Mr. BROWN: Does that mean that Mr. Davies wants to get these answers from the old country, and that this matter will be held up until he does?

Mr. DAVIES: If they have to come from the old country. They might come by wire. I would like to have them very much. I would like to remind this committee that the separate grading of Garnet wheat—assuming that it leads to a drop in the price of 5 cents a bushel, and it has been suggested that the drop is anywhere from 3 cents to 8 cents—means a loss of \$2,300,000 to the grower of Garnet and the northern parts of the prairie provinces, and I think that this committee can assume that they have in their hands a matter which means the loss of that much money to those growers; and remember that it comes out of the pockets of the growers and most likely goes into the pockets of the millers.

The CHAIRMAN: I am not finding fault with the questions propounded by Mr. Davies, further than I do not know whether he can get them answered. We can submit them, and if they answer them, well and good.

JOHN B. FISHER, called.

The CHAIRMAN: Mr. Fisher, will you kindly state your qualifications. What firm do you represent?

The WITNESS: Mr. Chairman, and gentlemen: I am the Canadian representative of the Scottish Co-operative Wholesale Society, Limited.

*By the Chairman:*

Q. Have you a statement to make?—A. I have just got a few notes here. I am the Canadian representative of the Scottish Co-operative Wholesale Society, Limited. We operate three flour mills in Scotland, milling approximately five to six million bushels of wheat annually, of which 80 per cent is Canadian.

I am solely a buyer of wheat for my firm and have had no milling experience, so, therefore, I cannot claim the distinction of being an expert on the question of Garnet wheat. Our mill manager in Scotland, our chemists and bakers are, however, very definite in their views regarding Garnet wheat, and are unanimous that it should be graded separately.

I would like to refer you to Bulletin No. 134—new series—published by Dr. Newman, on Overseas Tests of the milling and baking qualities of Garnet wheat, and on pages 51 to 54 you will find statements from Mr. William Smith, mill manager, Mr. Sproule, experimental baker, and Dr. James Sword, chemist. They have gone into the matter very fully and very little can be added, except when I received Mr. Hill's telegram to appear before this committee I cabled Mr. Smith asking him if he had anything further to say on separate grading for Garnet wheat, and he replied as follows:—

Favour separate grading Garnet wheat. This wheat requires separate conditioning treatment. Does not blend satisfactorily with other types Canadian wheat. Gluten hard, short in texture, deficient in elasticity. Baking conditions here clearly show its unsuitability for Scottish bread trade. Refer our reports August, 1929. Canadian wheat equals fully 80 per cent our total consumption.

The reports referred to in the cablegram are contained in this book which was published by Dr. Newman on the overseas tests of the milling and baking qualities of Garnet wheat.

The CHAIRMAN: Gentlemen, are there any questions you wish to ask of Mr. Fisher?

*By Hon. Mr. Weir:*

Q. The report states that Garnet does not blend well with Marquis?—A. Yes, sir.

Q. Then there would be no advantage in their having Garnet to blend with Marquis?—A. No. I might say, to make our position clear, we have purchased this year all Number 1 Northern for Scotland, since the first of August, 1933. The previous year we purchased 200,000 bushels of Number 2 Northern.

*By Hon. Mr. Motherwell:*

Q. From the Pacific?—A. From the Atlantic, 100,000 bushels of that being guaranteed Marquis. It was a shipment made from Fort William and the identity was preserved at Montreal, of Number 2 Northern, guaranteed 100 per cent Marquis.

*By Mr. Carmichael:*

Q. Why are you not purchasing any Number 2 since last August?—A. On account of Garnet being in it.



*By Mr. Davies:*

Q. Then your complaint in respect to No. 2 is equally true of Atlantic and Pacific ports?—A. Yes. As a matter of fact, I have a note here from Dr. James Sword stating that he had an Atlantic shipment containing a very high percentage of Garnet, and I think as far as our people are concerned that they overcame the situation by only purchasing No. 1 Northern.

*By Hon. Mr. Weir:*

Q. Would it be true at all to the narrow spread between 1 and 2?—A. I would not like to answer that question, Mr. Weir. I just buy on instructions from them.

Q. It would be one of the factors, of course, would it not, that there has been a very narrow spread between 1 and 2, and that the tendency would be to buy Number 1?—A. Of course, in Scotland we have to have a very strong wheat.

Q. Have you the figures of your purchases for 1932 of No. 2 Northern?—A. 200,000 bushels, of which 100,000 was guaranteed Marquis.

*By Mr. Garland:*

Q. Could you give the committee a statement of the blends of Nos. 1 and 2?—A. I am sorry I am not a miller, Mr. Garland.

*By Mr. Davies:*

Q. Do you know what other countries you import wheat from?—A. The Argentine, Australia, and domestic to make up that 20 per cent. We use 80 per cent Canadian and the other 20 per cent is made up of Argentine, Australian, and domestic, perhaps a little Russian.

*By Hon. Mr. Motherwell:*

Q. You do not like No. 2 Pacific and No. 2 Atlantic because there is Garnet in it?—A. Yes.

Q. And that is a very good reason from your standpoint?—A. Yes.

Q. That is, you like to get your colour in the Canadian wheat as well as the protein kick because the Scottish Co-operative blends largely 100 per cent Canadian wheat; at one time they were doing that?—A. Yes.

Q. Therefore, you want to get your colour in Canadian wheat?—A. Yes.

Q. And when there is Garnet in it it is a little off-colour for your business, but when you grade less No. 2 don't you grade more No. 1, as the result of not grinding too?—A. Yes.

Q. Then you do not really use any less Canadian wheat, you take a better one?—A. We take the better grades.

Q. If you have the alternative of a better grade then what is the kick about No. 2?—A. Well, perhaps we might get the No. 2 a little cheaper.

Q. Another miller racket; you want to get it still cheaper and then you might take it. I can understand it, it is just another Imperial Tobacco Company proposition.

*By Hon. Mr. Weir:*

Q. If Garnet were graded separately would your people buy it?—A. No, because it is unsuitable for the Scottish trade.

*By Mr. Davies:*

Q. Mr. Fisher, I am quoting again from the letter from Dr. Sword dated April 1st, 1932, at page 66 of the report of the Agricultural Committee, referring to Garnet wheat. In his letter Dr. Sword made the following statement:—

It is quite possible that all these results and defects may have no connection with Garnet wheat.



The parcels in question may be found to contain not one grain of Garnet.

Then at page 68 he says:—

For some years past the opinion has been growing in this country that Canadian wheat does not possess the strength that it used to do.

Now, this letter was written on April 1st, 1932, and at that time he made the statement that for some years past the opinion has been growing in that country that Canadian wheat does not possess the strength that it used to. Do you know how far these complaints go back in respect to Canadian wheat?—Well, I think they started before this test shipment, or just shortly after this test shipment, in 1929, I think.

Q. Do you know any reasons as to why Dr. Sword has been able to give his conclusions since April 1st, 1932, that it is traceable to Garnet wheat, because it is apparent from his letter that he did not know then that it was; you do not know what has caused him to change his view, Mr. Fisher?—A. No.

*By Hon. Mr. Motherwell:*

Q. Well, what is the grievance re Garnet from your company's standpoint then, Mr. Fisher? They want to tell the farmers to grow wheat of a certain grade, I suppose, much like that proposed by the English Co-operative, which I suppose is a very good idea for them, but I fail to see where the grievance comes in. I suppose you know that in the Old Country they are supposed to be using more home-grown wheat, which is very much inferior to this, is not that right?—A. I would not like to answer that.

Q. I mean as the result of the bonus. Wheat is being bonused in the Old Country. My recollection is there is 50 per cent more of English wheat grown as the result of the bonus and the mills are obliged to use part of it. Of course, that is only my memory, and I have not anything to substantiate that, but you, as representing the Scottish Co-operative, surely should be able to know that, whether they are growing more home-grown inferior quality wheat. At least I know they were, and I think it is still in vogue.—A. I think they are growing 30 per cent of the requirements, Mr. Motherwell.

Q. Well then, you are using now what is considered an inferior wheat in your grinding mix, why be so picknickety about ours?

*By Mr. Davies:*

Q. In the crop year of 1932 they grew about 55,000,000 bushels and their imports were slightly over 200,000,000 bushels.—A. I cannot speak as to the figures, Mr. Davies.

Hon. Mr. MOTHERWELL: If the millers of Scotland want to get a better and whiter flour it would not be a bad idea to start at home and eliminate their own home-grown stuff.

*By Hon. Mr. Weir:*

Q. Was there any such objection against our wheat before Garnet came into the picture? You have read about the objections to our wheat, before Garnet came into the picture.

Hon. Mr. MOTHERWELL: Oh, yes, ten times as bad, and complaints right from the Scottish Co-operative, too.

Mr. VALLANCE: Those were the days when mixing privileges were enjoyed.

*By Mr. Brown:*

Q. I suppose the fact that under British rules the mills are required to use more home-grown wheat would naturally make your principals desire a purer

quality of wheat to offset that requirement, would it not?—A. There might be something in that.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. DAVIES: I wonder if Mr. Fisher could give us a statement, or has he any information on exactly what their mix is now? Are they using domestically grown wheat in their mills? There has been quite a distinct and different agricultural policy in the United Kingdom in the last two years or so, and I think, as has been suggested before this committee, the domestic mills in Great Britain are obliged to use their wheat which is of inferior quality, or an inferior wheat, and I am wondering if some of the difficulties might be traceable to that. If Mr. Fisher could obtain that information for us, I, as a member of the committee, would like to have it.

The WITNESS: I will be very glad to cable over, Mr. Chairman, and get that information for the committee.

The ACTING CHAIRMAN: Are you ready to release Mr. Fisher, gentlemen? Witness retired.

The ACTING CHAIRMAN: Gentlemen, we have Mr. Brouillette, President of the Canadian Co-operative Wheat Producers Limited, with us.

L. C. BROUILLETTE, called.

*By the Acting Chairman:*

Q. What is your title, Mr. Brouillette?—A. I am President of the Canadian Co-operative Wheat Producers Limited, and the Saskatchewan Co-operative Wheat Producers Limited.

Q. Have you a statement, Mr. Brouillette?—A. Mr. Chairman, Honourable Minister and gentlemen, not anticipating what information you may require, but which no doubt will be brought out in questions, I have a brief statement here supplementary to the evidence submitted to the Agricultural Committee in April, I think it was, in 1932, by two representatives at that time. Mr. Hutchinson spoke for the three Pools, together with Mr. Steele, who is at the present time superintendent of the Manitoba Pool Elevators.

Q. You have that statement with you?—A. Yes, sir. I will just read it.

In coming before your committee, I do not feel that there is much that I can add to the views brought before the Agricultural Committee over two years ago on the same subject by Mr. Lew Hutchinson, Vice-President of the Alberta Wheat Pool and Vice-Chairman of the Central Board, and Mr. R. C. Steele, now superintendent of Manitoba Pool Elevators.

The stand that our organizations took at that time, and we have consistently adhered to since, is that if the buyers of our wheat object to the mixing of Garnet with the top grades of Marquis or wheat of similarly high milling quality, Garnet wheat should be given a separate grade. The buyer may not be always right, he may be prejudiced or biased, but we have to supply the kind of wheat he wants and in the form in which he wants it. Our Canadian millers do not want Garnet wheat and discriminate against it in purchasing their supplies. Some of our overseas buyers are apparently satisfied with the milling qualities of Garnet wheat, but apparently, most of them are agreed that they do not want Garnet mixed with other wheat as it apparently requires different treatment in milling. I do not want to go into the technical arguments as to the milling and baking qualities of Garnet wheat as compared with our standard Marquis variety, as you no doubt have all the evidence you require on that point, but the stand that the Wheat Pools have always taken is that the Canadian certificate final must guarantee to the purchaser the quality of wheat which that certificate states.

As the largest grain handling organization in Canada, we have at all times supported the action of Parliament in raising the outturn standard of grain from

the terminal elevators, although by so doing we made a very considerable financial sacrifice in our elevator earnings. Nevertheless, we believed that it was in the interests of the producers of wheat to maintain the reputation of Canadian wheat at the highest possible standard. Furthermore, we believe this objective is even more important to-day with narrowing world markets, with all the principal exporting countries, and many of the importing countries as well, putting into effect measures to improve the milling quality and raise the standard of their wheat.

As Canada is to-day the only country selling its wheat on a certificate final in all markets, we feel we cannot afford to take a backward step while all other countries are going forward. We further believe if any substantial proportion of millers at home or abroad insist on separate grading of Garnet, we, as sellers of wheat must pay due regard to the demand of the buyers. At the same time, we believe if your committee should see fit to recommend the setting up of separate grades for Garnet, it should be done upon the understanding that such grades shall not become effective until after another seeding season. We also suggest, meanwhile, that if possible, a sufficient number of shipments of Garnet should be made to enable millers to carry out milling tests on a commercial basis thereby enabling them to determine the actual value of Garnet as a milling wheat.

I may say in that connection that it would be of value if that could be done, to establish the spreads of Garnet rather than to penalize the farmer.

*By Hon. Mr Motherwell:*

Q You mean an arbitrarily fixed spread?—A. Yes, sir.

Q. But that would only be for a time?—A. I would say in the meantime try to carry on shipments in such a way that actual commercial milling tests could be made for comparison. In any case, we are convinced a definite decision on this matter should be reached at this time in order to enable the growers of Garnet to perfect their plans for future crops.

*By Mr. Vallance:*

Q. Mr. Brouillette, at the commencement of your statement you said: We believe that Garnet should be separately graded.—A. No.

Q. Well, based on that the question I want to ask is, realizing the dual function that you perform as president of the Co-operative—you said that at the beginning of your statement, did you not, that you believed that Garnet should be separately graded?—A. No.

Q. I thought you said that you recommended that Garnet should be separately graded.—A. I said—if you will pardon the interruption Mr. Chairman—dealing with that particular point:

The stand that our organizations took at that time, and we have consistently adhered to since, is that if the buyers of our wheat object to the mixing of Garnet with the top grades of Marquis or wheat of similarly high milling quality, Garnet wheat should be given a separate grade.

Q. Then you suggest there that you are in sympathy with separate grades. The question I want to put to you is this: Realizing that you are president of the Canadian Wheat Producers Limited and the Saskatchewan Wheat Producers Limited, performing a dual function, is that conclusion arrived at from the marketing end of the wheat or is it arrived at from the growing end of the wheat?—A. Mr. Chairman, that is a very good question. Our policies emanate from the producers in all these important major questions. Delegates representing the producers in each district attend annual meetings.

Q. I understand that.—A. It works from the bottom up.

Q. Then at those annual meetings has it ever been discussed with the delegates as to the opposition of Garnet growers?—A. Yes.



Q. It has been?—A. Yes.

Q. And it was the opinion of the delegates, at least, in accordance with that statement which you have now made, that Garnet should be segregated and graded by itself.—A. In view of all the information available, Mr. Valance, they came to that conclusion.

Q. Well now, because of the fact that we had at one time I think over 50 per cent of the wheat, you claim in your statement there that we are the largest in the grain business, and I would like to ask you Mr. Brouillette, how many complaints or to what extent have complaints come from the Old Country to your organization complaining about this mixture of Garnet No. 2 wheat; have you any with you?—A. There are some. A good deal of our information has come from the Department of Trade and Commerce, and in consultation with the Research Council people. However, about the time that a number of these complaints were coming in it was just a little bit after we were more or less out of the export business; our export business has been light although we have had considerable complaints in so far as our direct sales to Canadian millers from and through our elevator company are concerned.

Q. What years were you in the export business?—A. From the commencement of the organization 1924-25 up to including most of 1930.

Q. And up to that time, as exporters, you have had very little if any complaints?—A. I would not remember off-hand, but I think our salesmen or Mr. Smith would know more about that than I. But it is a fact that the Canadian millers, in so far as our sales to them are concerned, do not want Garnet.

Hon. Mr. MOTHERWELL: That is quite obvious.

*By Mr. Davies:*

Q. Do they want any Northern wheat at all?—A. There are times I imagine, depending on the amount they are taking from the South, but if there is too much Garnet being handled out of a shipping point they would not want to have their selection made from that point.

Q. Do not Canadian millers show discretion against Garnet, or against any wheat grown in the North?—A. There are times when they want wheat from the North, depending on how much they get from the South.

Q. But it is not very much, is it?—A. I cannot say but, as I say, if too much Garnet is being handled at our elevators at any one point they will not select from that point.

Q. However, is it not a well recognized fact that the millers show a discrimination against almost any wheat grown in the north unless the south happens to be all frozen up, and that sometimes happens?—A. Well, I may say that a lot of our information comes from our technical men, and agriculture chemists, or the associate committee of the National Research Council in conjunction and co-operation with other men in similar positions in the universities of the three Prairie Provinces, and they report from time to time. We have their considered opinions.

*By Hon. Mr. Motherwell:*

Q. You will agree that they are not infallible, and we ought not to tie up to anybody these times except one's own judgment.

*By Mr. Garland:*

Q. Mr. Brouillette, is your organization still in favour of continuing test shipments in bulk of Garnet, for test purposes? I thought you said that.—A. So far as I understand, the total amount of test shipments has been in the neighbourhood of 7,000 bushels. That would probably allocate to the different mills abroad something like 500 or 600 bushels. We think a much larger volume should be shipped in the interim period between now and when these grades are



established and separated in order that you will have the actual experience, and have something upon which to base the spreads rather than have, as Mr. Motherwell said, spreads set arbitrarily.

*By Hon. Mr. Motherwell:*

Q. There were train loads of Garnet hauled up to the Hudsons Bay, and we all commended you and the Wheat Pool for that, and I do not know what would have happened the exports via that route if you had not done that, but inasmuch as it was almost solid Garnet—I think it shows about 60 per cent average but a lot of it was more than that—did you trace up these shipments to the ultimate miller to see how they panned out, or did you get any word from them at all?—A. Mr. Chairman, we have some information. I would much prefer to answer Mr. Motherwell's question later, more particularly because we still have considerable stocks in store in the government elevator at Churchill, and anything I might say at the moment regarding the matter would not be an answer to the question.

Q. I did not know there was anything delicate about it, but I had made inquiries several times before and there was never any complaint?—A. I am not quite prepared to answer the question.

MR. GARLAND: I am just asking Mr. Brouillette the question, if he does not think that the whole of the evidence so far before this committee would indicate that the grower of Garnet is going to have to take a terrific loss the moment separate grading takes place.

THE WITNESS: I am not familiar with the evidence that has been submitted, Mr. Chairman, but in so far as I have gathered information from those who have made a study of the question, and men who are qualified to speak with a certain degree of authority, it does not boost Garnet. However, the reason I suggest large commercial shipments is for the very reason that you now bring out, Mr. Garland, that it would not be guess work in setting spreads as to relative values.

*By Mr. Garland:*

Q. If the loss is going to be so great, would it not be the part of wisdom that this committee should undertake to recommend the abolition of the growing of Garnet at some set date ahead rather than now penalize the grower who has his grain in the ground?—A. I would not suggest that.

Q. Now, would it not be the part of wisdom that this committee should recommend the abolition of the grading of Garnet at some set date ahead rather than penalize the grower who has his grain in the ground now?—A. Mr. Chairman, I am not too sure that in setting up separate grades for Garnet you are really mistreating the Garnet Producer, because if the purchaser would prefer having Garnet in its purity and not mixed with other grains, for reasons that he well knows it may be to the advantage of the Garnet producers to enable the buyers to buy Garnet as they would have it.

Q. Now, that is the point I want to get at. Can Mr. Brouillette give this committee any assurance that there is any reasonable market for Garnet in a pure condition?—A. I cannot.

Q. Nor can anybody else?—A. I would say that if it should develop that there is not a market for Garnet in its purity that is the reason why, and a stronger argument why its production should not be encouraged at the expense of other varieties that are wanted.

Q. I am not taking exception to that, but to the method by which we shall reach that point. That is the question that is now under consideration. Do you not think it would be better, in view of all the evidence against Garnet, that we should set a date, say, one year from now, prohibiting the growing of

Garnet, and giving the men who are now in Garnet a chance to get out instead of penalizing them right away?—A. No, I do not think I would go that far in prohibiting—

*By Mr. Perley:*

Q. Your statement covers the province of Saskatchewan I would think pretty well. Have you had any experience with the growers in the northern part where they have been growing Garnet as to whether they are switching to Reward?—A. I have not got recent statistical information. What I have got here is covering the years 1931, 1932 and 1933. I think, by Dr. Geddes, who is now with the Board of Grain Commissioners; but I am of the opinion that the publicity that has emanated from similar sittings of this body in the past and from information available on this question, that they may take action in the setting up of separate grades has probably created uncertainty in the minds of the purchasers, this question being raised from time to time, has probably caused the producer to produce a little less. Reward seems to be coming into greater favour.

*By Hon. Mr. Motherwell:*

Q. What is your word this year from the Garnet in the north? Did it escape frost when the others were frozen?—A. Often, it does.

Q. In view of the attitude of the countries to encourage home production, both in Europe and in England—to encourage home production of wheat, do you think it is reasonable to expect us not to think of our own growers a little bit? Take the Scotch millers and the English millers and all the rest of them, as I indicated before, they very frequently grind 100 per cent Canadian wheat, and they have had a real complaint against Garnet because of its colour; and inasmuch as the Canadian miller has not access to their white imported wheats they are in much the same position as the old country Scotch miller who wont grind 100 per cent Canadian wheat. Some of those millers in the old country and Europe are grinding inferior wheat for their own home consumption and eating inferior bread of their own volition. Do you think that our farmers should suffer by putting up extra gilt-edged stuff to make up for this inferiority when they are grinding for themselves their home grown soft wheat? Great Britain at one time grew all her own wheat about 100 years ago. I do not think she will ever do it again. At one time over a hundred years ago she did not buy any wheat, and there is some record that she exported some. I do not think that condition will ever come again, but she will try to grow considerable more and she can. I think the witness, Mr. Fisher, gave the information that the home grown requirements of the milling mix was 30 per cent home grown wheat. Why should they want to exact from us a superfine wheat at the expense of our northern grower when they get gilt edge stuff like one northern and one hard if they so desire? Why are they fussing about this 2 Northern that there is no difficulty in selling to the European buyer and many others. There is no blockade of it at our ports, not even at Hudson Bay. Is this attitude the same yet? Should our attitude be the same now as it was before when the Scotch miller was grinding no home grown wheat? If Great Britain or any other country can use their own bum wheat why should they be pernicky about some good wheat of Canada because of its flour colour?—A. In answer to Mr. Motherwell's question, I think some reasons advanced by Mr. Motherwell are probably some of the strongest arguments that could be used in favour of a separate grade of Garnet. I say that with all due respect; because as a market demand shrinks and as other supplies increase and pile up buyers are more careful about getting quality in their limited purchases; and as no doubt you are aware our grain finds a market in many respects because of its strength to be used for the very purpose

that you point out—to blend with other wheats—and it makes them all the more careful to see that they get good quality.

Q. May I say this: Mr. Fisher admitted that because of not using 2 Northern, either Atlantic or Pacific, they used that much more number 1. Then I asked him: "On account of Garnet being in number 2, you do not use any less Canadian wheat?" And he said, "No." If they do not use any less Canadian wheat, what is the rumpus about?—A. Of course, our experience in dealing with the Scotch people is more or less along the lines Mr. Fisher advances—that they purchase to a large percentage Canadian wheat because their people insist on having high quality bread, according our standards.

Mr. VALLANCE: That condition applies in Scotland, but it does not apply to the United Kingdom as a whole, and England uses much more wheat and flour than Scotland does.

The WITNESS: But Scotland, I would submit, Mr. Chairman and Mr. Vallance, the Scotch are more particular as to the quality of their bread.

Mr. VALLANCE: That is characteristic of the Scotch.

Hon. Mr. MOTHERWELL: That is right, and their oatmeal too.

*By Mr. Davies:*

Q. I would like to ask the witness a few questions. Was your organization, Mr. Brouillette, in the export business when the 1928 crop was sold?—A. Yes.

Q. When the 1929 crop was sold?—A. No.

Q. Had you turned it over in the meantime to the Co-operative Wheat Purchasers Limited? Were they doing the selling then?—A. Yes.

Q. You do not know their experience?—A. Not in detail. Our salesman, Mr. Smith, who was located at London—

Q. You were a member of the Central Selling Board, were you not?—A. At that time? Yes.

Q. Now, at the time this evidence came before the committee in 1932 you will recall that a substantial complaint emanated from the Marquis growers, who claimed at that time that the large spread between number 1 and number 2 was because of the large quantity of Garnet that went into number 2; do you remember that?—A. Yes.

Q. And since that time the picture has changed, has it not? The spread has narrowed a great deal, has it not?—A. There is still a wide spread west.

Q. But the spread has diminished considerably?—A. It diminished, I think, the following year, 1932-33, and again we have a repetition more or less the same as the year previous, during the current year.

Q. Still that decreased spread between 1 and 2, without there being any lessening in the quantities of Garnet wheat, seems to refute the viewpoint held at that time, does it not, to that extent?—A. You might take it as such; but there are many factors that must be considered, as to the amount of any one particular grade, as to the qualities of wheat from other exporting countries and the manner in which it is offered for sale, and many other factors.

Q. Can you give the committee any information as to why it is that the spread between 1 and 2 of Vancouver is less than the spread between 1 and 2 ex Atlantic?—A. Well, I would say—that would be because of the amount of Garnet in number 2 West.

Q. The spread is less between 1 and 2 ex Vancouver compared with 1 and 2 ex Atlantic ports?—A. That would be a recent situation, then, but not generally prevailing. I will tell you why: because it has only been a short time ago that where the spread was so much wider west on number 2 as compared to east, some of the grain that ordinarily would take the western freight rate was being directed east. They could do that to advantage and make a fraction of a cent or so by so doing, and it would be deliverable on our Winnipeg option.



Q. The freight rate should not affect the spread between 1 and 2 Northern, should it? The differential in freight rates should not have any effect upon the spread?—A. No.

Q. Do you know anything about any complaint emanating from buyers in continental Europe in regard to Garnet wheat?—A. We have not been in touch with them.

Q. Do you know anything about complaints in respect to all varieties of wheat grown in the north in as far as protein content is concerned?—A. At seasons of the year—different years there are, depending on moisture and length of time maturing, differences in protein.

Q. Would you be prepared to make a general observation as to whether northern wheats are much lower in protein content, irrespective of the variety, than the southern wheats?—A. At least, in considerable areas of the south it would be higher; and on that question I have it from the information available—Dr. Geddes again, I think—that where Reward, Garnet and Marquis are growing in the same sections of the north it shows that Reward invariably produces higher protein.

Q. Have you any figures on that in your mind?—A. But in the south it is not so noticeably in favour of Garnet, as Garnet would show up in the north.

Mr. CARMICHAEL: You mean in favour of Reward?

The WITNESS: Yes.

*By Mr. Davies:*

Q. Why did you recommend it should not be separately graded until the next crop year 1935?—A. Well, in the first place, most of the complaints we have received from the north have been on the ground—you see it was anticipated there would be separate grades for this crop, probably. A decision had not been arrived at prior to seeding. Producers of Garnet claim that it will shell and sprout and they will have a voluntary growth in the next year's crop and they contend that in order to eliminate that and in order that they will not be penalized by this voluntary Garnet if they have to change to Reward or some other wheat they should know sufficiently far in advance to cultivate their land in the fall to get a germination of the voluntary growth to clean up the land, and, furthermore, to give them every possible opportunity to exchange seeds, if they wish to, for other varieties; and in that respect, our organization will be pleased to co-operate, if the decision should be arrived at here, in order to make the seed of other more desirable varieties available. Again, it is only by arbitrarily setting up spreads—you figure it might be a 6 cent spread—if you set up separate grades for Garnet compared with Marquis this will allow more time in the interim to make these commercial shipments and try, as far as you can by actual experience, to establish the proper spread basis.

*By Mr. Carmichael:*

Q. Mr. Brouillette, these conclusions are arrived at on the thought that there are to be separate grades set up for Garnet wheat. According to the bill that the committee has before it, it is only proposed to exclude Garnet from grade number 2, and not necessarily implying that there will be a separate set of grades established for Garnet wheat. Now, in view of that fact, and the further fact that this committee in 1932 recommended that the Grain Act be amended to make operative for the crop year 1933-34—that is for this last year's crop—the recommendation of the Western Grain Standards Board in as far as it relates to the grading of Garnet wheat as contained in the annual report of the Board of Grain Commissioners for Canada for the year 1931—now, in view of those two facts—first that it is merely the purpose of this bill to exclude Garnet from number 2 Northern as at present established, and, in the second place,



that a great deal of publicity was given this matter two years ago that that was to be done for this past crop year, do you think it is working an undue hardship on the grower of Garnet wheat if this bill should be adopted now and put into effect?—A. Mr. Chairman and Mr. Carmichael, there has been a lot of talk about this and you really have not done it. Now, the grower gets accustomed to having a lot of talk going on about this and they are probably risking it again that it will be talk again and that it will not be done this year. Now, then, he has gone ahead and seeded. At the best he would not have had a sufficient notice to take advantage of all these things that intervened in the interim.

Hon. Mr. WEIR: The fact that the Standards Board did not act on our recommendation would be a pretty good indication to the farmers that it was not as important as the committee recommended.

Mr. CARMICHAEL: As a matter of fact, this report was never adopted by the House.

The WITNESS: That is what I was going to say.

*By Mr. Carmichael:*

Q. Just follow that a little further. If this bill should be adopted by the committee, and reported upon favourably in the House, and Garnet wheat were excluded from 2 Northern, it would still be eligible to go into number 3?—A. Yes, but do you want to do that? Is that fair to Garnet?

Q. Now, that is just the question which the committee will have to decide. There is another point upon which you might give us some information. In view of the fact that the producer of Garnet will get possibly twice the volume per acre in yield that the grower of Marquis will get out on the open prairie, do you think that even from that viewpoint the producer of Garnet would be unduly discriminated against?—A. On the first question. Does that mean that by excluding Garnet you are going to stop at 2 Northern? That would hardly be fair.

Q. According to the bill that is what is proposed?—A. Yes, but coupled with that has been the idea of setting grades for it, has it not?

Q. That may eventually come, but not according to the present bill?—A. Otherwise you would be unloading the whole of it into number 3.

Mr. BROWN: I do not think there is any serious thought in adopting this bill that Garnet should be relegated to number 3. Now, with regard to giving notice, I think this committee took a reasonable view two years ago when they recognized it was only fair to give notice, and this present committee is willing to be just as fair to-day. I am quite satisfied that there will be no proposition from this committee that its action should be applied to this year's crop.

Mr. BROWN: We would not think of any such thing.

*By Hon. Mr. Motherwell:*

Q. Did you ever know of any wheat which was graded separately from northern wheats, Manitoba northern wheats—did you ever know of any variety being graded separately and surviving, except possibly Durum which is not a milling wheat?—A. I doubt, Mr. Motherwell—you would remember farther back on that than I would. I do not think so.

Q. There was White Fife, Kota, and there was what they called Quality—White wheat—they all died on the roost and died inside of a few years. Quality wheat had a great run for a while, and now you only see one or two cars. Mr. Fraser will correct me in that.

Mr. FRASER: Yes, that is all.

*By Hon. Mr. Motherwell:*

Q. If you want to kill a variety of wheat that is the scientific way to do it—grade it by itself—and the best wheat in the world will die under those conditions; because the general knowledge that the world has of Manitoba wheat is such that Manitoba wheat is a far more familiar term on the Liverpool Corn Exchange than it is in many parts of Canada. The term “Manitoba” stands for something, and the moment you say that it is something else, even though it were better than Manitoba, it will have to go right down to the foot, and people will not take time to demonstrate what it is. In the meantime what is going to happen to the farmer growing it? He will probably be on the junk pile, if he is not there now?—A. That is the reason we suggest that you make these commercial shipments, so there will be no case to make about it.

Q. There is something in that?—A. That was done by Dr. Newman and Dr. Birchard in 1929.

Q. It was only one small shipment.

*By Mr. Carmichael:*

Q. I have another question I would like to ask. We have heard quite a lot of evidence here as to the hardship that will be worked on the grower of Garnet wheat, and one member estimated the amount of money he might lose at some two million dollars. Have you ever, through your organization, computed what is being lost by the grower of Garnet wheat, who produces 86 per cent of the volume, because of the general depression in the price of wheat on the foreign market because of the inclusion of 14 per cent Garnet?—A. No. I have never attempted to figure that out.

Q. It seems to me if that were figured out it would amount to quite a staggering sum.

Hon. Mr. WEIR: That would not affect number 1, would it?

Mr. CARMICHAEL: Unfortunately, a lot of our wheat goes into number 2, and in bad years numbers 2, 3 and 4 are important grades.

Hon. Mr. WEIR: That would not affect number 1, would it?

Mr. CARMICHAEL: No.

Hon. Mr. WEIR: And yet we have the narrowest spread between 1 and 2 for twelve months that we have on record. It could not be much of a loss. I would think it would be the opposite.

Mr. CARMICHAEL: Prior to those last two years importers were buying considerable number 2; now they are going to other countries.

Hon. Mr. WEIR: Does not the spread between 1 and 2 give us the best evidence that the buyers must be buying number 2; if they were not buying number 2 it would not be up that close to number 1.

Mr. CARMICHAEL: The spread between number 1 and number 2 this past year has been considerably more than the year previous.

Hon. Mr. WEIR: Oh, no; just these last two or three months; but for twelve months in succession covering a crop period the spread between 1 and 2 was less than the normal spread.

The WITNESS: Of course, the amount of number 2 available may have something to do with it: at the present time I imagine about 20,000,000 bushels would be the outside figure of number 2 in store in terminals, and probably 4½ to 5 million bushels west and the balance east.

*By Mr. Davies:*

Q. How many grain buyers have you got at your elevators in Saskatchewan?—A. 1,067.

Q. Can these grain buyers employed at your elevators take a handful of wheat out of a waggon and say whether it is Garnet or not?—A. They are doing that to an extent now regarding number 1. That is necessary. I have consulted with our elevator men, superintendents and others, who gave me their opinion on that from first-hand information and experience. If you have the time I will give you their set-up.

Q. I would like more data, and I have talked with some grain buyers that I know personally and they say that it is a matter of tremendous difficulty, and they think that only a very small proportion of the buyers in Western Canada can actually do that.

Mr. BROWN: I think Mr. Fraser could give us an opinion on that point.

The WITNESS: I have some information on that.

Mr. DAVIES: I would like to get this information at the present time. I value Mr. Fraser's opinion, but I would like to get this information from someone who represents the grain company.

The WITNESS: Of course, that is a problem that enters into this question. There is no doubt that it is going to continue as an elevator problem; it is not going to be minimized—the question of space, special binning and all that. However, it is necessary to-day for your elevator agents to be able to detect Garnet in order that it will not go into number 1 Marquis. I read from this memorandum:—

Undoubtedly the segregation of Garnet in grades other than 1 Hard and 1 Northern would result in some inconvenience, due to the necessity of keeping space for the additional grades. As far as actual grading by agents is concerned it appears to be the general opinion of those who have had any considerable amount of experience in handling or grading Garnet that it will not be particularly difficult to distinguish between Garnet and other varieties or to detect Garnet mixtures in other varieties or vice versa, but that it may sometimes be difficult to establish the actual percentage of one variety contained in the other, particularly where one or both of the varieties of a mixture are more or less degenerated. We have noted numerous samples in which Garnet was of normal size and colour. This is particularly true of samples coming from districts where much of the wheat is starchy and piebald. In such cases Garnet does not carry its usual colour and the kernels are often unusually plump so that it resembles Marquis or Reward.

We still think that it will be as difficult to distinguish Garnet from other Spring Wheat varieties as it is to draw the line between many of the existing grades of Spring Wheat, except in odd cases where the deliveries may consist of degenerated varieties of abnormally developed kernels.

We have consulted with our inspectors on this, because it is important, and they pretty well agree that it can be done. Of course, if it is not done that is the risk and loss of the elevator companies.

*By Mr. Brown:*

Q. Do you find any actual experience that your country elevator buyers lose their grades because they have failed to find Garnet in number 1?—A. We have had some experience.

Q. Is it general at all?—A. I would not be able to tell exactly to the extent.

*By Mr. Davies:*

Q. Is there any possibility that if Garnet were graded separately that the Garnet growers might find themselves in the position where elevators would not accept their wheat?—A. They could not do that if they had space and the grain was in a condition to be stored.



*By Hon. Mr. Weir:*

Q. Would there not be a preference shown for Marquis?—A. The car order book comes in there.

*By Mr. Davies:*

Q. Would not all this put the Garnet growers in such a difficulty that it would put their product at a tremendous discount because that product was graded separately?—A. In the first place, the car order book was designed for protection on the basis of space and condition of grain. In view of the light crops we are experiencing and the large number of elevators available and out to do business, I do not think that that is a difficulty that should be anticipated. Elevator companies should be out to get business.

*By Mr. Garland:*

Q. Mr. Brouillette, have you ever worked in an elevator?—A. No.

Q. I am inclined to think you will find when there is a rush on that stored grain and special binned grain will be subject to a discrimination so far as Garnet is concerned. It is a very simple matter for the elevator agent at that time of the year to evade the strict observance of the Grain Act, and it is almost impossible for any grower to check him up on it without examining the bins.—A. I cannot speak for agents or other elevator companies, I can only speak for our own.

Hon. Mr. MOTHERWELL: Mr. Chairman, before there was any question at all regarding Garnet, here is the first official bulletin issued on Garnet by Dr. Newman and A. G. O. Whiteside, cereal advisors to the Minister of Agriculture, and in it is contained the report of a chemist, Mr. A. J. Banks. Mr. Banks is chemist for the Ogilvie Flour Mills, Montreal, and I will read some good things that he says and some bad things as well regarding Garnet:

The milling qualities may be disposed of in a very few words. They were satisfactory in all respects except flour colour.

That is before there was any propaganda around the country at all, just the honest opinion of the Ogilvie Flour Mills chemist. Then I will go on to a bad thing, if I can find one. Speaking of the colour:

This view is further emphasized by reference to the colour quality. The decidedly strong yellow colour is a particularly unfavourable feature.

Then he goes on to say:

Garnet wheat would blend well with Marquis, and yield an excellent flour, probably one giving greater general satisfaction than that from straight Marquis.

With regard to the first statement, I think the Canadian miller has some justification except this, that he does not have to buy it. He has got innumerable other grades, and he should have the freedom to buy what he likes. This is a free country and the farmer should have the freedom too in the growing of Garnet if he wants to as long as someone will buy it at satisfactory prices. Apparently this gentleman is honest in his opinions and he has shown both sides, and I am reading both sides also. He says:—

Garnet wheat would blend well with Marquis.

That is before there was any rumpus or any propaganda:—

... any yield an excellent flour, probably one giving greater general satisfaction than that from straight Marquis.

Did you ever read that report or hear of it?

The WITNESS: Not recently



Hon. Mr. MOTHERWELL: Well, I read it two years ago; I have read it so often I got tired reading it, and the anti-Garnet men tired of hearing it read. You have had a good deal of experience, or some of your men have had in operating elevators, and these men say that if you could get this type of wheat blended in the proper proportion it would be all right; the testimony of other chemists and millers is to the effect that it should be around 25 per cent to 30 per cent, and that Garnet would blend with Marquis and make a better flour than either of them separately. We talk about distribution. That has come up this session in the House quite frequently. Is it impossible to get this wheat so blended with the other wheats that each would benefit the other? A wheat that can make Marquis better milling wheat than it is alone is no slouch of a wheat, and that is what it says here that it will make a more satisfactory flour when blended with Marquis than Marquis alone. Then he goes on to say:—

We have already too much Durum wheat under cultivation.

He is a real tight rope walker this gentleman.

This wheat, like Garnet, has a high degree of fermentability, low dough strength and resilience, and a strong yellow colour.

The ACTING CHAIRMAN: Mr. Motherwell, if you will pardon me interrupting, we have Mr. Ramsay with us and we would like to hear from him before we adjourn.

Hon. Mr. MOTHERWELL: All right, Mr. Chairman. We are going to have a sitting to-morrow and I would like to take advantage of that to ask Mr. Brouillette one or two questions.

Witness retired.

The ACTING CHAIRMAN: Gentlemen, we have Mr. Ramsay, Chairman of the Board of Grain Commissioners, here to-day. Is it your pleasure to hear him now?

E. B. RAMSAY, called.

*By the Acting Chairman:*

Q. Will you state what position you hold, Mr. Ramsay?—A. Chairman, Board of Grain Commissioners.

Q. Have you any statement prepared, Mr. Ramsay?—A. No.

The ACTING CHAIRMAN: Gentlemen, Mr. Ramsay has not prepared any brief but he is quite willing to answer any questions you may put to him.

The WITNESS: Perhaps I might just mention, our Board is more interested in the mechanics of the operation than any other phase perhaps, although our connection with the Grain Standards Board who are responsible for the grades makes the result of your work quite definite. I got more information, perhaps, in a general way, when in Europe eighteen months ago than in any other way. Every miller I found had different ideas; they are not particularly interested in our ideas. They said to me: Manitoba Northern wheat has been shipped under what you might call a trade name, and when we buy Manitoba Northern we expect to get that type of wheat; now you are selling this new wheat and we do not like it, we do not get good results in the mills from it and we feel that you are selling us something under false pretences.

*By Hon. Mr. Weir:*

Q. Is that the Continental miller?—A. Both Continental and the United Kingdom. The Continent was not so particularly strong on Garnet wheat; in fact a good many millers did not know what Garnet wheat was, and for that reason, a certain amount of discretion had to be used in discussing the question

with them, because I knew at that time we had from thirty millions to forty millions of bushels of wheat in Canada which had to be exported. You could not sell it at home, and no matter how you grade it it is my opinion you will have Garnet wheat with you for a long time. I do not know of any wheat that has done more to improve the quality of the Northern wheats than Garnet. They grow two Northern wheats. Formerly they had four Northern wheats.

There is one feature of it that is very important, and that is to maintain your certificate final. I do not know what would happen to the farmer if Europe says they will not accept our certificate final. In my opinion that will have more serious effects on the country as a whole. I have no technical proof to give you that Garnet will not sell. I think it will sell on its present basis as 2 Northern.

*By Hon. Mr. Motherwell:*

Q. You do not think it will sell much under 2 Northern?—A. No. I think it will find its level about 3 cents under 1 Northern, that is, its deliverable price on the futures market.

*By Mr. Brown:*

Q. Did you notice any of what might be called serious effect of the refusing to accept our certificate finals?—A. Yes. The tendency in Europe is to get away from certificate finals. They will not take an American certificate final now. They have a very very strong organization of millers in Scotland and England; I would say it is 100 per cent, and there is a danger, from the Canadian standpoint, of Russia coming back to compete with this Manitoba Northern wheat.

Q. Would you suggest then that we should maintain our grades at such a level that they will accept our certificate finals?—A. Yes. That is the great market for Canadian wheat.

*By Hon. Mr. Weir:*

Q. Anywhere in the West, Mr. Ramsay, Reward is a better milling wheat than Marquis, on test?—A. Well, I cannot say, Mr. Weir. I am not competent to go into the technical details of all these differences.

Q. What I had in mind was this: If Reward is so much superior to Marquis, and our big concern is to get the best possible reputation, or to maintain the best possible reputation for our wheat overseas, what would you think of suggesting a separate grade for Reward so that they can secure that super wheat and it can be easily multiplied?—A. Mr. Weir, these problems have to be dealt with, I think, in a broad way. One of the great difficulties we have had in grain inspection has been in maintaining one standard for our Canadian wheat. That is to say, we say the same standard of wheat goes out of Churchill, Vancouver or Fort William, and it is extremely difficult to do. Some years wheat in one end of the country is not of the same characteristic or quality as wheat in the other end of the country, and to carry on your grain trade in its present form you have to be very practical. And, if you will remember, we revised that Act before; we cut down our grades. That arose out of the fact that mixing was prohibited and the inspection department tried to split the farmer's ear so that he would get the best return from the mixing of grades.

Q. But Reward is the least variable?—A. You would have to do it on the basis of protein content. There would be no reason to segregate Reward from Marquis, because the two wheats under field conditions are very much the same.

Q. Reward on experiment is superior to Marquis, or any other wheat, as regards its milling quality, and that is what they want, and my understanding is there is less variation in Reward in the North and South than there is in Marquis.—A. You would have to ask Mr. Fraser if he thought he could grade Reward separately from Marquis under field conditions.

Mr. FRASER: I think the only way that you could make a separation would be on protein content because Reward varies in different localities as well as the other does. Reward grown in the North would not be worth the same grade as Reward grown in the South.

Hon. Mr. WEIR: But there would not be the same variation as there would with Marquis?

Mr. FRASER: Of course, Marquis comes down in grade.

Hon. Mr. WEIR: It would be easier to distinguish between Reward and Marquis, would it not, than between Garnet and Marquis?

Mr. FRASER: Well, I would not like to say that. We have been making separation of Garnet from other wheats, but we have not tried to make a separation of Reward and Garnet. We probably could do it with a little experience.

Hon. Mr. WEIR: Reward practically all goes No. 1 in the North under anything like favourable conditions and it is about the only wheat that does.

Mr. FRASER: Yes, I think that is right.

Mr. BROWN: I think it would be a case of *reductio ad absurdum*.

Hon. Mr. WEIR: I object to the honourable member's rather perverted sense of humour. What we are discussing here is to get the best quality possible in our Canadian wheat, and if experiments prove that Reward wheat is better than Marquis wheat I think the honourable member himself is then *reductio ad absurdum* in making the interjection, because what we are trying to do is to improve the quality of our wheat, and if Reward is better than Marquis then we ought to consider Reward.

Mr. BROWN: There has been yet no person come forward to prove that Marquis and Reward cannot be satisfactorily milled together. That fact separates it entirely from the other fact that we have evidence that Garnet and Marquis cannot be satisfactorily milled with the other wheats, and it is just because I see the vast difference between those two positions that I used the expression I did, and I think my argument will stand examination.

Hon. Mr. WEIR: Not if it is based on quality.

The WITNESS: Might I suggest, Mr. Weir, that when you get down to handling carloads of grain on the individual quality the wheat business of Canada will be confined to the country.

Hon. Mr. WEIR: I appreciate the difficulty in that, but what I had in my mind was this, whether or not you feel from your visit to Continental Europe, or to Europe including the United Kingdom, that we might not be well advised to put pressure behind in the increasing of Reward?

The WITNESS: Oh, I think that would be a very good thing. At the same time, Reward is not suitable for the south.

*By Hon. Mr. Weir:*

Q. On account of yield?—A. Yield, yes. You would starve to death growing it.

Q. The results of the Experimental Farm I do not think show such a discrepancy in yield. Of course, the conditions are much more ideal?—A. Yes.

*By Mr. Davies:*

Q. In 1932, I think, before this committee, you expressed the viewpoint that you would not be surprised to see the spread of Garnet go to 10 cents if it was graded separately.—A. Was that statement not made in connection with the deliveries to be made on the futures market. I think that is what was meant. If you suddenly throw 25,000,000 bushels of wheat on the market—



Q. I gather the impression that the producer of Garnet was in the position that if it were graded separately he was faced with the possibility of getting 10 cents a bushel less than he is getting now. Am I wrong in that assumption?—A. Well, possibly you have not got the whole story. When the matter was up in 1932 the Grain Exchange refused to have anything to do with it as far as making it deliverable, and it is their business to set the spread. That is one of the reasons why the suggestion has been made that a real effort should be made to establish the wheat in Europe where it would find its own value. You cannot sell it as 2 Northern now. But here is another feature: The importer says I will try some of that, I am going to buy it cheaply and see what it is made of. Would not that be your reaction?

Q. What I was wondering is if you had changed your attitude since 1932 in respect of that spread, or are you still of the same opinion?—A. I cannot give you a definite opinion, and after all it would only be an opinion of whether it would be 3 cents or 10 cents.

Q. I am not saying you stated it as a fact, but my recollection is you stated it as a possibility.—A. Under certain conditions it is quite a possibility in my opinion.

*By Hon. Mr. Motherwell:*

Q. In the report of Dr. Newman and Dr. Burkard following the shipment to the Old Country of Garnet wheat, I think it was in 1929, wheat grown in 1928, we heard of very few complaints reported as to the unsuitability of Marquis and Garnet properly tempering together for grinding purposes.—A. I do not know, Mr. Motherwell.

Q. You do not know?—A. No. I asked some of the millers in Europe the result of that experiment, but they said 500 bushels was a laboratory experiment, and if you are going to give us Garnet to try out commercially you have got to give us 16 to 20,000 bushels so that we can mix it and sell it to the baker.

Hon. Mr. MOTHERWELL: We can easily have that report here another day, Mr. Chairman. The statement has been made here that we cannot blend and condition Marquis with Garnet, but the fact is that especially in the Old Country they have been doing those things for hundreds of years, grinding all kinds of wheat, every kind of wheat grown under the sun, and still some say they cannot condition for milling Marquis and Garnet when blended, say 50-50. In the Old Country they have up-to-date machinery to do the tempering and conditioning, but let them put in the same tempering machinery here in Canada such as they have in the Old Country and they will overcome the difficulty.

The WITNESS: You mean in the laboratories?

*By Hon. Mr. Motherwell:*

Q. No, in their mills.—A. But they cannot blend it, and that is what I understand all the fracas is about.

Q. My recollection is that there was not one official complaint made to Dr. Newman or Dr. Burkard to indicate that there was any difficulty in the blending and conditioning of Marquis and Garnet.

Hon. Mr. WEIR: Did not the millers tell us that last year?

Hon. Mr. MOTHERWELL: Yes, and when they cannot get Garnet to blend with Marquis they get something else, but here is a man who makes no complaint. Let me read that again. Mr. Banks, the chemist for the Ogilvie Flour Mills Company, distinctly states:—

The milling qualities may be disposed of in a very few words. They were satisfactory in all respects except flour colour.



Then he says:—

Garnet wheat would blend well with Marquis. . . . .

Now, is this man a fool? If he is he would not be kept by the Ogilvie Flour Mills Company as long as he has been kept:—

Garnet wheat would blend well with Marquis, and yield an excellent flour, probably one giving greater general satisfaction than that from straight Marquis.

The WITNESS: Mr. Motherwell, of course it will blend, but what the European objects to is a shipment of grain with 80 per cent of this wheat.

Hon. Mr. MOTHERWELL: That is the real difficulty. Could not yourself or Mr. Fraser evolve some plan of a more scientific distribution.

The WITNESS: Is not that what we are trying to do?

*By Hon. Mr. Motherwell:*

Q. That is a question that is in the air everywhere.—A. Unless you are going to allow mixing, Mr. Motherwell, you can overcome it that way.

Q. Oh no. The question of mixing is not involved.—A. It is involved in your proposal.

Q. Oh no, it is blending of types of the same grades, but mixing is mixing of different grades. You know that and so does Mr. Fraser, but blending types or varieties of the same grade is a different question altogether from mixing of grades.—A. Is not that what we are trying to do, to blend similar types of wheat.

Q. There are different types of the same grade, most decidedly, and that is what the aim should be to get them blended as much as possible.—A. Well, that is what we are trying to do.

Q. Yes and failing.

The ACTING CHAIRMAN: Are there any other questions?

Mr. VALLANCE: I move the committee rise, Mr. Chairman.

The ACTING CHAIRMAN: It is almost one o'clock. We will adjourn now to resume in camera to-morrow at 11 o'clock.

The committee adjourned at 12.55 to resume on Wednesday, May 30, at 11 a.m.















SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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WEDNESDAY, MAY 30, 1934

No. 8

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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WITNESSES:

Dr. H. M. Tory, President, Research Council of Canada.  
Dr. Robert Newton, Director of the Biological and Agricultural Division,  
National Research Council.  
Mr. Lew Hutchinson, Vice-President, Alberta Wheat Pool.  
Mr. L. C. Brouillette, President, Saskatchewan Wheat Pool.





# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

WEDNESDAY, May 30, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 a.m., Mr. Senn, the Chairman, presiding.

*Members present:* Messieurs Barber, Bowen, Boyes, Brown, Carmichael, Davies, Donnelly, Gobeil, Golding, Hall, Loucks, Lucas, Moore (*Chateauguay-Huntingdon*), Motherwell, Mullins, Myers, Perley (*Qu'Appelle*), Pickel, Senn, Shaver, Smith (*Victoria-Carleton*), Stewart (*Lethbridge*), Stirling, Taylor, Totzke, Vallance, Weir (*Macdonald*), and Hon. Mr. Weir, Minister of Agriculture—(27).

*In attendance:—*

Mr. J. D. Fraser, Chief Inspector, Board of Grain Commissioners.

Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

The Committee resumed consideration of Bill No. 53, An Act to Amend the Canada Grain Act.

Dr. H. M. Tory, President, Research Council of Canada, called, examined and retired.

Dr. Robert Newton, Agriculture Division, National Research Council of Canada, called, examined and retired.

Mr. Lew Hutchinson, Vice-President, Alberta Wheat Pool, called, examined and retired.

Mr. L. C. Brouillette, President, Saskatchewan Wheat Pool, recalled, examined and retired.

The Committee decided to leave the question of printing the evidence heard on this day until a later date. The Committee then adjourned until to-morrow, Thursday, May 31, at 11 a.m.

WALTER HILL,

*Clerk of the Committee.*



# MINUTES OF EVIDENCE

HOUSE OF COMMONS,

Room 429.

MAY 30, 1934.

The select standing committee on Agriculture met at 11 o'clock, Mr. Senn, presiding.

The CHAIRMAN: Mr. Motherwell asked a question yesterday in regard to wheat at Fort Churchill, and if the committee so desires we can recall Mr. Brouillette.

Mr. L. C. BROUILLETTE, recalled.

The CHAIRMAN: Would the committee like to have the question read before Mr. Brouillette commences?

Mr. VALLANCE: If you have the question there it would be as well to read it.

The CHAIRMAN: I have the question. It is as follows:—

Q. There were trainloads of Garnet hauled up to the Hudson Bay, and we all commended you for that, and I do not know what would have happened if you had not done that, but inasmuch as it was almost solid Garnet—I think it shows about 60 per cent but a lot of it was more than that—did you trace up these shipments to the ultimate miller to see how they panned out, or did you get any word from them at all.

Mr. Brouillette made the statement that he would rather answer that question to-day.

The WITNESS: Mr. Chairman and gentlemen, before I answer that question I wonder if you would permit of a correction in an answer I made yesterday to a question asked by Mr. Davies in regard to our export experience and how long that had continued, or something to that effect. My answer, instead of our exports being confined to the 1928-29 crop only should have been extended on until about December 1930. At that time exports on the part of the Interprovincial Group discontinued, but in the meantime a small amount of exports have been carried on by both Alberta, I think, and our own organization in a very small way. I hope you will allow that correction to be made in the record.

In respect to the question asked by Mr. Motherwell, our supplying of grain to Churchill, with the exception of last year, has been sold to exporters; therefore, we would have had no further interest in the matter, other than the sales made and the price received.

I would further suggest, that you see to it that such shipments are not delayed until the coming crop, because you know how slowly matters of that kind move in international fields. I think you will find sufficient stocks available in country elevators to enable shipments of Garnet to be made from the present stocks. There may be a variation as to the quality of Garnet produced in the two years if you have further shipments made from the 1934-35 crop.

The CHAIRMAN: Let me remind you, Mr. Brouillette, that this committee will not make a report; we are dealing with a Bill. That is as far as we can go.



This reference is to either pass the Bill or amend it in whatever form the committee desires; we are not in a position to make a report.

The WITNESS: I do not know your procedure.

*By Mr. Vallance:*

Q. You mentioned the fact that you are not in the export business but you sell to exporters. Is that the position of the pool to-day?—A. Not entirely.

Q. Roughly speaking would you export 50 per cent?—A. No.

Q. You would sell more to an exporter than you would export?—A. Yes.

Q. What I am trying to get at is this: the evidence that has been adduced so far has shown that a greater content of Garnet goes out from the Pacific coast on the average than goes out from the Atlantic.—A. That was number 1. The others have not been shipped.

The CHAIRMAN: Have you finished your statement, Mr. Brouillette?

The WITNESS: There was some reference made to millers. For your information I would suggest that you consider our Canadian millers one of our important customers as their total grind of our total production during the last five years runs all the way from 5.5 per cent to around 23 per cent of the total crop produced, of which we supplied from 3 to 4 million bushels last year and the year before.

*By Hon. Mr. Weir:*

Q. You spoke of commercial shipments on a large scale. Would your association give all the support it could to obtaining the largest possible shipments and the largest proportion of Garnet possible?—A. Yes. We did on the previous shipment. We would be glad to do it again.

Q. Might I suggest here for the benefit of Mr. Newman or whoever makes these growing tests that special care be taken that the wheat which is now in Churchill have very representative samples of both number 1 Northern and number 2 Northern to see the content of Garnet that is in both or in each. That might be very valuable?—A. Yes. There was a point brought up by Mr. Vallance. It may be a little aside from the question; but it is well for us to keep in mind that during the last few years from 75 to 80 per cent of our wheat that goes into export is now being handled by international grain firms. A few years ago that figure was more or less reversed—about 75 or 80 per cent was handled by Canadian firms and there was probably more of a direct interest.

Witness retired.

Mr. LEW HUTCHINSON, called.

*By the Chairman:*

Q. Mr. Hutchinson, will you state your occupation?—A. I am vice-chairman of the board of directors of the Alberta Wheat Pool.

Q. Have you a statement to make?—A. We were requested to give evidence in regard to this matter just as we were two years ago. I believe our chairman, Mr. Wood, was called at first, but owing to not feeling able to make the long and weary trip here and back Mr. Wood begged to be excused and arrangements were made to substitute myself for him, which I understand has been accepted and is agreeable to the committee. I might say it fell to my lot two years ago to give evidence before this same committee on the same question, and the evidence I gave is on your records; and in looking over that evidence the other day I could not see anything in it that I would not be perfectly willing to give to-day. In fact, our evidence on this Garnet question if not the same as it was at that

time is a trifle stronger possibly in that we certainly consider that Garnet should have a separate grading.

Now, our experience over the last four or five years—particularly the last three when we have had so much evidence of Garnet being discriminated against by the buyer—is, first, that the discrimination did not show so much in the form of a discrimination against Garnet as a discrimination against number 2, and certain gentlemen were somewhat reluctant to place the blame on any particular variety or name. In the last year and a half or two years more of them have come out and made no bones about it that it is the Garnet in our number 2 that they object to. Now, I have no doubt that you have ample evidence before you from technical men in regard to the difference in the milling of Garnet and Marquis—not necessarily a difference in quality, but a difference in the method to be pursued. Not long ago there appeared before our board the manager of the Robin Hood Mills in Calgary, and we were asking him some questions about this Garnet. He took us over to the mill and showed us various samples of bread baked from Garnet and blends of Garnet and so forth, and he made the pretty definite statement that they experienced very great difficulty in milling Garnet and Marquis mixed. Probably this is all old to you, but it was direct evidence of what we had always heard before that the trouble is in the tempering of the wheat. As you all know they use a great deal of water in tempering the wheat to soak the wheat sufficiently to remove the bran. It seems that Garnet takes a great deal more soaking than Marquis or Reward before the bran can be removed. So if they get a mixture of Marquis and Garnet and if they soak it sufficiently well to remove the bran from the Marquis it will not remove the bran satisfactorily from the Garnet, and vice versa, if they soak the wheat to take the bran from the Garnet in a satisfactory manner it makes almost a mash out of the Marquis which makes the Marquis entirely too soft and wet. To my mind that is one of the outstanding reasons why the miller has a grievance against Garnet and Marquis mixed. Whether he prefers Garnet or Marquis separately, he certainly does not want them mixed. The Canadian mills have always tried not to use Garnet if they could help it. In fact, for three years we have found it difficult in regard to our western crop to sell the Canadian mills any number 2 unless we could definitely stipulate that it contained no Garnet. One of their objections to it, aside from this one I have mentioned of the processing, is the fact that it makes a yellow flour for which there is, apparently, not very much demand in Canada. It is argued against that, I know by some, that that does not cut any figure because they can bleach it; but these gentlemen at the Robin Hood Mills showed us samples of bread made from bleached Garnet flour, and as they said, and you could plainly see it, the bleached Garnet flour is not at all satisfactory; indeed, it does not bleach white or yellow white, but it bleaches a sort of grey which does not make a nice looking loaf at all. So they have made a definite statement against it unless they can get it segregated. This gentleman told us he would like to use some Garnet—he had been trying experiments with it—and that there might be a place for it, but it must be segregated.

Those are the main reasons. There is also the fact that a great many times, particularly in a year when the Marquis section of our country suffers from drought and from light crop, we find a decided discrimination against our Twos out of Vancouver. If we have a good crop all over the provinces—particularly a good crop in the Marquis regions—it is nothing like so perceptible. The crop of 1932 was a fairly good crop—I think, if anything a better crop in the Marquis regions than in the Garnet regions, possibly—and those spreads which had prevailed the year before practically disappeared, I presume due to the fact that a far greater volume of Marquis went through Vancouver and the Garnet was nothing like so noticeable. This past year, the 1933 crop, where the Marquis sections had a very light crop, the situation has stuck out again like a sore thumb, and we have discrimination against Twos out



of Vancouver. I cannot say that I have followed the spreads right through and handled them on a statistical basis as possibly should be done—although statistics are rather dangerous things. If you go far enough you can prove nearly anything you want by statistics; just as bed is the most dangerous place because more people die there than anywhere else. Now we have seen this spread of between 2 and 3 cents and sometimes as high as 5 cents between Vancouver Twos—the difference between Vancouver Twos and Vancouver Ones and Fort William Ones and Twos. Again, if you look at the Liverpool quotations—I do not say this holds good all the time—but time and time again you have noticed Liverpool quotations with a spread of from 5 to 6 cents between Atlantic Twos and Pacific Twos. So that these things we believe with certainty: the keeping of Garnet in our certificate is certainly to the detriment of the reputation of our certificate; and I think we must all agree that we must keep that certificate final inviolate, because it is the only thing we have to tie to. We are so situated that it would be almost impossible for us to run a sample market business with our customers as far away as they are; and if they fail to recognize that certificate, if they have any doubts as to what they are going to get under that standard certificate, it militates against our wheat, and that is one of the biggest considerations we have to face—maintaining the integrity of our standard certificate.

Now, in segregating Garnet it will give Garnet a chance. Possibly it is a better wheat than Marquis. If you segregate it the millers can get it and handle it as they like. It is possible that it might go to a premium as Durum did. It was supposed to be a terrible hardship on Durum growers when they first decided to segregate Durum, but Durum has made its own standing and has many times sold at a premium over 1 Northern. It is possible that Garnet may do the same, but it is absolutely impossible for it to do that as long as it is sold in a mixed form with Marquis and in a form that the millers do not want. It would appear almost as sensible for us to insist on selling our number 2 mixed with Garnet as it would for a seed grain grower to sow fall and spring wheat mixed and insist that the buyers take it because it has a good weight and looks fine. We realize the difficulty in connection with it; we realize that it may possibly work a little hardship on the growers of Garnet; but with all the talk there has been about it and with the action taken by this committee in covering the ground two years ago, I think nearly everybody knows about it, and a great many of the growers were prepared to accept segregation of Garnet—that is they were prepared in this way that they must have seen that it was going to go, and there was sufficient agitation anyway to make them consider that there was a case for it. They must have been fairly well forewarned about this, so they have had plenty of opportunity to go into something else. If they have made up their minds to grow nothing but Garnet, well and good; but certainly they cannot expect to keep Garnet mixed with other grain as long as it is militating against other number 2. It would not be fair to the grower of Marquis, and I have been surprised that you have not had a great deal more protest from the growers of Marquis wheat as to what has been done to his number 2 than you have had.

In my experience, especially since two years ago when I gave evidence here, I have found that the question we are discussing has come up in a number of little meetings wherever I go in the Garnet-growing country. The question has been asked why the Pool takes this stand against Garnet, and I have never yet experienced any difficulty in obtaining a verdict from any meeting I have attended—it is the only thing to do—segregation—once the matter is explained on its merits. Not long ago, early in the spring, I was in an absolute Garnet country, west of Red Deer, where they claim they cannot possibly grow anything else but Garnet, and we had a very good discussion and a large meeting, and they brought up this question of Garnet and they were quite hostile at the start, but when we had finished the leader of the discussion came to me and he

said, "I realize that we have got to segregate Garnet; there is no use trying to sell it to the millers the way it is, and the only sensible thing to do is to segregate it."

It is true it will make for complication in the elevator business—the country elevator business will become more complicated—but we can handle it, I think. It will not make for much more complication in the straight Garnet districts, but in the mixed districts it will. But I think that can be handled. Certainly, we cannot sacrifice the integrity of our certificate final to save a little trouble for our elevators.

I do not know that I have anything more to say unless you have some questions to ask me. As I say, I have not had much time to prepare anything since I was called away from home to come here.

Mr. STERLING: Did the Robin Hood Mills representative explain to you how they would probably use Garnet if it were segregated?

The WITNESS: Yes. He seemed inclined to think they might develop a trade for the Garnet loaf, a straight Garnet loaf.

Hon. Mr. WEIR: Not blended with Marquis.

The WITNESS: Yes. Even though it was a yellow loaf.

Mr. STERLING: Blended with some other wheat?

The WITNESS: No. He thought that Garnet could possibly make a place for itself as a straight proposition. While it makes a little different quality of bread, some people prefer that. It is not as white a bread, but it is a nice flavoured bread, and he wanted to experiment to see if there was a place for it, because he realized how many Alberta farmers were growing Garnet, and if there was a place to use it he wanted to use it.

The CHAIRMAN: I suppose you do not know whether any experiments have been conducted to see how it would blend with our Ontario winter wheats?

The WITNESS: I am not acquainted with that.

*By Mr. Carmichael:*

Q. From your experience with the grower, would you say it would work any undue hardship on the Garnet grower supposing it were decided to segregate Garnet for the 1934 crop year; or would you suggest leaving it another year?—A. I do not think it would work any great hardship on him. He has had lots of warning. On the other hand, I think it would be the part of wisdom to let it stand another year. But I would certainly like to see some definite action taken this year, because if you do not we are up against the same thing next year and we will never get anywhere. All things considered, even if the legislation was enacted this year, probably it would be better not to put it into operation until next year's crop. Whether there was a real hardship worked or not it leaves ground for the farmer to complain that he was not stopped before he seeded his wheat.

*By Hon. Mr. Weir:*

Q. Have you any specific complaints with you?—A. I have not, I am sorry to say. I left in a great hurry.

*By Mr. Vallance:*

Q. Mr. Hutchinson, I gather from your evidence that you are in favour of segregating Garnet from Marquis?—A. Yes.

Q. Mr. Weir, the Minister of Agriculture, made a suggestion which met with derision from some of the committee. I am quoting now from the National Research Council's report on the grading of Garnet wheat by the associate committee on grain research. We are talking of substitutes now for Garnet, and Reward has been very favourably mentioned: "Of the early ripening varieties that might be used to replace Garnet undoubtedly the most promising one is



Reward. In milling and baking quality this variety has proven superior not only to Garnet but also to Marquis." As the minister suggested the other day. If we are going to infer—and I think we should to a certain extent—that the importer or buyer is going to discount Garnet, would we have to segregate Reward from Marquis because of its white milling value? Can you not foresee that possibility?—A. Oh, possibly, but I very much doubt it from the fact that the outstanding difference in the processing does not exist with Reward and Marquis; they require the same treatment. Our grades settle that end of it. If we have a crop wherein the latter variety of wheat gets a little damaged and the Reward does not, the grades will settle that in putting your best into 1 Hard and your damaged grain takes its place where it belongs down the line.

*By Hon. Mr. Weir:*

Q. You stated that over a period the spread between 1 and 2 at Vancouver, because of the greater quantity of Garnet being in number 2, was a greater spread on the whole than that between 1 and 2 at Atlantic ports?—A. Yes.

Q. Now, the evidence submitted shows that for a continuous period of twelve months the average spread between 1 and 2 at Vancouver was less than the average spread between 1 and 2 at the Atlantic, and that is one of the things that I believe is worrying some of these farmers?—A. What period does that cover?

Q. It covers two crop years, I believe. It is in the records. I thought you could think over that and give us an answer to-morrow?—A. If it was a period covering the 1932 crop year that might account for it. As I stated a while ago, we had a big proportion of Marquis in our western shipments that year and the Garnet did not stand out anything like so plainly. On the basis of transportation and so on there usually should be a slight premium at Vancouver on all grain practically.

Q. That would not interfere with the spread between 1 and 2, because number 1 would get the same benefit as number 2?—A. Yes, it would be the same. It may have occurred during the time when we had plenty of Marquis.

Q. Now, is that logical? If there was plenty of Marquis going out of Vancouver—that is as shown by the quantity of number 1—Would there have been the same demand for number 2? Would not the tendency have been to take more of the Marquis?—A. There would be a certain amount of that Marquis that would be number 2—probably quite a lot of it. I do not remember the figures for that year; but the more Marquis of all grades, particularly number 2, that goes west, naturally the smaller proportion of Garnet in our number 2; and the less Marquis there is the larger the proportion of Garnet.

Q. The question has come up a number of times—we have had information on it this morning—with regard to the record at both the Pacific and Fort William of the number of bushels of 1 Northern and 2 Northern from the years 1930 to 1933, and the question has been raised that that might have been due to a scarcity of 1 Northern at Vancouver, or more number 1 than number 2—that that might have had something to do with the spread?—A. Of course, you cannot pin the whole case of spread to one side or the other, because, as you say, so many other elements may enter into what makes the spread; but we take them more as an indication of where the wind blows, because we have a good many outstanding cases of that. To follow it technically through you might not be able to prove anything definitely by the spreads.

Q. Would your organization be willing, if it is decided to give a separate grade to Garnet, to assist in the distribution of a new wheat to replace it by special binning this new wheat in exchange to farmers for Garnet if they so wish it, bushel for bushel?—A. Naturally I have not the authority now to make a definite statement on that, but my idea is that they certainly would.

*By Mr. Lucas:*

Q. The bill at present before the committee proposes, as I understand it, to eliminate Garnet from number 2 the same as it is eliminated from number 1 Northern and to allow it to go into number 3. Is it your opinion that that would be a wise action, or would it be better to segregate it entirely and make it a grade by itself?—A. I think it would be better to make it a grade by itself, speaking offhand. Of course, there is comparatively little Garnet goes into number 3. You totally change the character of our present number 3 wheat by doing it. I am speaking a trifle at random in this. Mr. Fraser, probably, can tell you. I do not think that there is very much Garnet in most of our number 3.

Mr. FRASER: Those figures were presented by Mr. Newman a few days ago to this committee and they showed that number 3 showed considerable Garnet, up as high as 35 per cent.

*By Hon. Mr. Weir:*

Q. The same argument used for number 2 would apply to number 3 if you segregate Garnet?—A. Yes, I think so. Of course, there is a limit how far down the line you should go. I think you should make a 1 and 2 Garnet, and anything that came below that would be other grades. If you dump the whole of Garnet into 3, as it is now, in the first place, you eliminate any chance of Garnet ever getting its own. If it has a future it has no chance to come to it on that basis, and you change the character of our number 3 which would make for confusion in the minds of our customers.

*By Mr. Davies:*

Q. You said you did not think it would make for great hardship to Garnet growers if Garnet were separately graded this year. The figures that have been given to this committee indicate that there is a probability of about 47,000,000 bushels of Garnet wheat being threshed this year, and it has been suggested that if it were graded separately the loss in price to the grower might vary from 3 to 8 cents a bushel. Take it at an average of 5 cents a bushel, and that would mean that the growers of Garnet would get about \$2,350,000 less than they otherwise would. Do you not think that that would be quite a loss to the Garnet growers?—A. Possibly I did not make myself plain, or finish what I started to say. I might qualify that statement by saying that it would depend entirely on the basis on which Garnet sold after it was segregated. If Garnet takes a heavy discount, naturally it is going to be harder on the man who has Garnet than if it did not; but take the western Garnet grower who may be taking quite a discount; he may be taking the same punishment on his number 2 now as the spreads quite frequently indicate, although they may not do so all the time. So that that would offset it. There is no question about it that the Garnet man stands to take less money for his wheat than he has been doing if Garnet sells at a discount. You cannot get away from that. Nevertheless, even at that, what is the Marquis man taking on his number 2 under present conditions. You cannot make any of these regulation without affecting somebody adversely. It is just a question of how far you have to go in considering these matters, particularly in view of the fact that the Garnet growers have had enough warning that something is going to be done about Garnet, and they could have got out if they wanted to. I cannot remember of any such consideration having been shown the growers of fat hogs when it was decided to put our hog business on a straight grading basis with a definite reduction for the man with the fat hogs. His wishes were not consulted that I know of.

*By Mr. Lucas:*

Q. The grower of Garnet now cannot get anything better than number 2 for his Garnet, can he?—A. No.

Q. If it were segregated and graded 1, 2 and 3 you told us it would get into number 1?—A. Yes.

Q. And, therefore, he might get nearly as much for his number 1 at any rate as he is now getting for his number 2?—A. It is entirely possible. Your ideas as to what the discount is going to be are more or less speculative. I certainly would not stand here and say there is no chance to take a loss; it is bound to penalize him to some extent, I presume; but how much, I do not know. The thing that bothers me is our whole wheat business. I do not think we would be justified in continuing the way we are going on that account.

*By Mr. Vallance:*

Q. In your experience has the spread between 1 and 2 been greater since we have been growing Garnet in the west than it was before it was grown?—A. Now, you say in my experience. From what I have noticed any time I have checked up, my opinion would be that it is, but I could not say for the actual figures taken right clean through. I would not undertake to say they would bear it out, but I think so, because we very seldom had any more spread at Vancouver than at Fort William between 1 and 2 in years past until this Garnet question became a problem, and since that time we very often have had a very much wider spread at Vancouver than at Fort William. Of course, as Mr. Weir pointed out these spreads may or may not have been caused by the Garnet, but we have had strong suspicion from all evidence that that was the trouble.

*By Mr. Davies:*

Q. I have given figures on the discrepancy between 1 and 2 back ten years, and my observation is that the spread between number 1 and number 2 actually has been a great deal less since we have had Garnet than before; and I wanted to clear up that question as to why Marquis growers are protesting?—A. Were those figures for spreads the Canadian spread taken altogether, or the western spreads?

Q. The Canadian spreads?—A. Well, of course, Vancouver has handled a comparatively small—that is she has not handled a very large proportion of the total Canadian crop, so that your Winnipeg situation would practically govern that.

*By Hon. Mr. Motherwell:*

Q. I think you are from Alberta. I think I met you two years ago representing the pool?—A. Yes.

Q. Regarding Garnet, I never knew why we wanted this committee in camera. I suppose it is in camera now.

The CHAIRMAN: The notes are being taken.

Hon. Mr. MOTHERWELL: That is a good idea. Camera does not amount to much anyhow. We all have friends to tell things to, and our friends have friends. We sometimes think it is only the women who tell tales, but we sometimes do it ourselves.

*By Hon. Mr. Motherwell:*

Q. Is there any congestion of Garnet piled up anywhere because there are no buyers for it?—A. Yes.

Q. Where is it?—A. Well, we carry considerable Garnet stocks at Vancouver. Number 2 has been our heaviest and poorest seller and hardest to get rid of.

Q. There is no compulsion on the part of anybody to buy it?—A. No.

Q. We had a gentleman by the name of Fisher here representing the Scottish Co-operative. He took the ground that he did not buy any Twos; he did not number 2 anyway, east or west, and he bought number 1. I asked him whether that would mean that he was buying more number 1 than he would otherwise



do, and he answered yes. I said, "Does it reduce the amount of Canadian wheat that you purchase?" and he said no. He buys as much Canadian wheat as he ever did. If he buys as much Canadian wheat as he ever did it is because it pays him to do it, and there is no compulsion to buy number 2. He buys number 1. What is the trouble?—A. Well, but Mr. Motherwell, if all the buyers took that attitude what would we do with our number 2?

Q. There is nothing to indicate there is any congestion of number 2. What is more, Mr. Newman has shown us that our number 2, some of our number 2 that goes to the Atlantic carries as high as 60 per cent Garnet, and because they do not know it, they gobble it up, but when it goes from the Pacific they raise the regular old mischief. What do you expect? Suppose there was no Garnet in the world do you think our Vancouver wheat would have the same value as Atlantic? It is grown in a northern country. I do not want to deprecate our northwest. The northern country is the haven of our south country settlers. Those people who have been blown out of the south are moving northward. Do you think if Garnet were graded alone you would have uniformity in the Garnet?—A. No; and you will not have it in your Marquis, but the grades take care of that pretty well.

Q. I do not sell that at all. You cannot have uniformity in that big country, 1,000 miles by 500; nothing in the way of grain is absolutely uniform. I might say long ago that Dr. Newman discovered that, and when we were sending that shipment of Garnet to the Old Country and to Europe we took it from all over Manitoba—Minnedosa, the foothills, Scot and Southey, so we would get an average sample, knowing that Garnet depends for its strength on locality just as much as any other grain, and when you isolate it you will not get a uniform grade in different parts of the country?—A. Under our present regulations at the terminals when the grain goes out it goes out as a fairly uniform grade.

Q. It will be blended?—A. It is a combination of all those various differences, but it goes out as a fairly uniform grade.

Q. I have heard people say that the objection to Garnet was because it came forward in such large quantities in certain cargoes and in limited quantities at other times and they never knew what they were going to get. Assuming there is something in that, they soon knew it after it arrived, didn't they? Do they do anything with it commercially until they know subject it to analysis?—A. It is impossible to do anything with it if it is a mixed cargo.

Q. Mixed with what?—A. 50 per cent Marquis and 50 per cent Garnet. You cannot segregate it again.

Q. Surely not, but they analyse it, don't they—all the scalpings and screenings and everything else including milling and baking test?—A. Yes, but there is a definite difference in the early processing or milling, the tempering, between the two wheats. That is the big sticker.

Q. Who says that?—A. The manager of the Robin Hood Mills in Calgary told us that very plainly the other day.

Q. Yes, the Canadian Mills will tell you anything, just anything, and put up a song and dance against it. Of course, their objection is colour, and that is well taken from their viewpoint. The objection to Garnet on the question of colour for Canadian use is well taken. That is true, because they cannot get the colour like the old country mills can from other countries. I have been over there personally and I hunted up the evidence. Garnet gives the miller a little more trouble, if they haven't used it before, but the British millers have been grinding wheats of all kinds for all countries for bread for 150 years and their conditioning processes are so complete that they can handle Garnet or any other wheat. Millers not so equipped put colour up for an excuse. That is my excuse—that one particular important market. Sir Alfred Humphries, probably the most important man in wheat research we have who was knighted on that account—that may not mean much or a lot—he takes the ground that there is



no difficulty on that score. I have a report from Mr. Banks, chemist for Ogilvies, who takes the ground that Garnet will condition when mixed with Marquis and those that are not familiar with it find it causes them trouble. If you have a new sewing machine your wife will find it troublesome until she gets onto the run of it. The same is true with a new binder. It takes the first half day or so to get on to it. Mr. Brouillette suggested commercial shipments for a while so that they could get acquainted with the wheat. That was a good idea. But to jump on it because it could not be conditioned with other wheats that is as obsolete as the hills. Those old country millers can condition anything. No millers in the world can fit into new conditions better than they can; but if they can get it by itself, so as it is less trouble of course they want it, but don't imagine they are going to have Garnet uniform if graded separately?—A. It will not be any more than it would be if our regulations work as they do. Now, it will be a fairly uniform sample.

Q. What do you mean?—A. Our outgoing standard is set definitely, and it is being lived up to.

Q. Your outgoing standard comes up to the standard?—A. It is a composite.

Q. If you could get it composite?—A. It should be fairly uniform.

Q. It is not. You know it is not, it depends upon the locality it is grown in?—A. Of course, it will vary.

Q. Where did the mills pick off their best ears, their choicest ears of wheat when they had that privilege up until 1930? They may do it yet for all I know, but not so much. Mr. Hamilton could tell us that?—A. It depends on what they want. If they want high class wheat, the district from which that comes.

Q. What do our Canadian millers want—the best wheat they could get for export flour. Where would they get it at?—A. Well, as I understand it they used quite a little of our lower grades of wheat. They did not mill all 1 Northern.

Q. Did you ever study the protein map?—A. Yes.

Q. You do not want to tell us.—A. They do not always want the highest.

Q. They want Garnet if they can get it by itself at low prices. It is a pure miller's racket like the Imperial Tobacco racket. That is what it is for, and they will make use of it, get it by itself. Did you ever know of a new wheat, any wheat being segregated outside of the Manitoba wheats that ever lived over three or four years?—A. Well, there is the question, of course, as to whether it will live or not according to its quality. If it has anything that does not appeal to our buyers and they do not want it the quicker we segregate it the better, and if they do want it the quicker we segregate it the better.

Mr. CARMICHAEL: I would like to raise a point of order here. The committee decided to-day to hear its witnesses in camera. Mr. Hutchinson's evidence was not included in that procedure; he was supposed to come on to-morrow. Now, would it not be better if we continued as we started, and complete Dr. Newton's evidence and have Mr. Hutchinson to-morrow.

Hon. Mr. MOTHERWELL: If I am spoiling any agreement I will be glad to sit down as I was unable to be present at the beginning. I notice there is always a protest from the ante Garnet men when their witness gets in a corner. If I am exceeding the conditions set down at the beginning I will sit down and leave it at that.

The CHAIRMAN: I was going to ask Mr. Motherwell if he would have any objection to continuing his questioning of Mr. Hutchinson to-morrow.

Hon. Mr. MOTHERWELL: No. I would rather have it to-morrow, much rather.

The CHAIRMAN: I am going to raise another point. While we are quite glad to receive any evidence that Dr. Newton can give us, I would like to point out

that the sub-committee in their recommendation suggested that Dr. Tory, president of the Research Council, should report more particularly on the storage qualities of Garnet flour. Now, I think, perhaps, that is the evidence that the committee was looking for from Dr. Tory, and possibly that is what we will receive from Dr. Newton. I think, probably, Dr. Newton has that in mind in giving his evidence.

The CHAIRMAN: We will now call Dr. Tory.

Dr. H. M. TORY, called.

The WITNESS: Mr. Chairman, I have very little to add to what I stated to the committee two years ago when I was giving evidence before it. My interest in the matter arose over the request of parliament that the Research Council should undertake an investigation into the problem of the protein content of wheat as a basis of grading, and afterwards, when that work was done, the request of the parliamentary committee on agriculture, that we should classify the various types of wheat grown in western Canada with regard to their value and usefulness in order that undesirable types should be eliminated. When the question of the relationship of Garnet to other wheats was raised, I think originally by the Millers' Association, we were called in in consultation with the Department of Agriculture and the Department of Trade and Commerce in connection with it. At that time it seemed to me that the sensible thing to do would be to make an appeal to the people that bought our wheat; that, after all, we were raising a marketable product to be sold in the markets of the world, and it would be wise for us as well as being in the interest of our scientific studies that we should get the reaction of the persons who were purchasing our wheat as to the comparative value of Garnet as a marketable product. The result was, as you already know, that a shipment was made to Europe, and a report on results was put before your committee, in 1932, at the time that I gave evidence two years ago. This report and statements based on it were put in as documentary evidence at that time. There is little to be said, as far as I am concerned, about these reports, other than to say one word about our method of dealing with the problem so that you may understand how it was done.

When the question of classifying our wheats as to desirable and undesirable types was before the Council we decided there was so much confusion of thought about it—not only the particular problem, but the general problem of wheat grading that it was highly desirable to undertake a pretty thorough investigation. We organized a committee known as the Grain Research Committee and brought into co-operation a group of workers in the universities with a view to repeating in each laboratory all the work that was being done. The result was that in the provinces of Alberta, Saskatchewan and Manitoba, the university laboratories were brought into the organization and all our investigations were repeated in each. Every sample of wheat tested was tested by the three laboratories, and the reports that were put before your committee—I have copies in my hand here—were the result of the findings of these three laboratories. Originally there were four laboratories but one withdrew; and the results of the findings of these three laboratories were unanimous. The position of Garnet so far as this committee was concerned—that is the committee of the National Research Council—will be found in this document which was written by Dr. Malloch, Dr. Geddes and Dr. Larmour, three of the experts who were working on it. You will find it on the first page of the report, reprinted from the Canadian Journal on Research for April, 1932. You will find the classification there. Perhaps it might be well to recall the classification made in one of the tables in that report:—

1. Varieties which are entirely satisfactory: Reward, Ceres, Marquis, Pioneer, Red Fife, Renfrew, Red Bobs 222, Supreme.

2. Varieties which are fairly satisfactory: Early Red Fife, Ruby, Early Triumph.

3. Varieties which are unsatisfactory: (a) White wheats: Quality, Axminster, Hard Federation; (b) Varieties differing from Marquis in milling characteristics: Garnet, Kota; (c) Varieties inferior to Marquis in baking characteristics: Garnet, Parker's Selection, Brownhead, Huron, Kitchener, Preston, Marquillo.

4. Varieties which are very unsatisfactory: Early Prolific, Dicklow, Vermilion.

That was the finding of the committee of experts and has been published as the result of their best thinking on the subject. Now, since that time we have been receiving reports of a semi-confidential nature, some of which, I believe, have been already submitted to the committee; but we have not changed our minds in the slightest on the subject for the reason that the evidence that has come in since seems to justify the position we took at that time. I may note that my interest in it has entirely been the interest of seeing that we do not risk the reputation of our wheat in the markets of the world. We have no other interest, and we have studied it from that point of view entirely. The details of these investigations are in the hands of Dr. Newton who is in charge of our committee. I think my opinion on this evidence is not worth more than the opinion of any other person who takes the evidence and reads it and makes up his mind with respect to it; but the scientific facts upon which our decisions were based will be given to you by Dr. Newton. I do not care to go into that. I think that is all I have to say, unless you care to ask me some questions about it. I have not been doing the work personally; I have been, in a general way, directing the organization that has carried on the work.

Witness retired.

The CHAIRMAN: Now, gentlemen, I understand that Mr. Motherwell is particularly anxious to hear Dr. Newton's evidence, so we will call Dr. Newton.

Dr. ROBERT NEWTON, called.

The CHAIRMAN: Proceed with your statement, Dr. Newton. First tell us what your position is.

The WITNESS: Director of the Division of Biology and Agriculture of the National Research Council. Mr. Chairman, as Dr. Tory told you, we completed some years ago a rather elaborate series of investigations of the qualities of different wheat varieties, which we had undertaken upon a resolution from Parliament which, later, was submitted to your committee and came to us with your conclusions attached to it. I do not propose to repeat anything I said at the last meeting when I reviewed all the work we had done up to that time and which has all been written into the evidence. It is the new information that has come to us since that time that you are interested in—the information during the last two years. That falls into two classes: reports from overseas, and reports that have come to us from our collaborators in the west who are still carrying on their grain research investigations and getting information on Garnet wheat as well as on other varieties and on other problems which they are studying.

At your first hearing a couple of weeks ago, I believe the Hon. Mr. Stevens submitted some extracts from the reports of Mr. H. Horace Ward, an English chemist, who has been sending us copies of his confidential reports from time to time for the last few years. I notice in the evidence that somebody asked who Mr. Ward was. I met him when I went over there on that protein inquiry. Mr. Broomhall of the Liverpool Corn Exchange and several millers I met there, when they knew I was interested, told me that I ought to go to see Mr. Ward;



that he had all the information I wanted. I went to see Mr. Ward, and I was quite astonished at the amount of information he had and the large number of mills he appeared to be advising—I believe there were over thirty mills taking advice from him. Those extracts from his reports, which reflected an increasing anxiety at the increased proportion of Garnet wheat appearing in Manitoba grades, have been read into the record, and I shall at this moment simply read to you with your permission a letter from Mr. Ward which he sent to me after I had cabled him asking if we might use extracts from his confidential reports for the information of the committee. He replies under date of May 11, 1934, as follows:—

I have your cablegram re Garnet wheat and cabled back “consent with pleasure.” I am very pleased that something is being done in connection with Garnet wheat for it certainly is giving us a great deal of trouble over this side, and I am strongly recommending all our friends to buy Atlantic wheats in the hope that you will keep this wheat out of our Atlantic types.

Another point I notice is that the 4's we have had latterly appear to be more like Garnet with a portion of number 6. It is quite certain that unless this problem of Garnet wheat is tackled it is going to do Canadian trade serious harm because should we have good Russian wheats next season, millers will limit Canadian wheat to an absolute minimum.

Our difficulty lies on the conditioning of this wheat, Garnet mills better at 18 or 19 per cent of moisture whereas English requires at the most 15 per cent. Those millers that have no separate conditioning treatment for Manitobas and plates have the utmost difficulty in getting anything like an even condition of the grains. For them it is bad enough with ordinary Marquis wheats but it is very much aggravated with Garnet.

I should be glad to hear that something definite has been done.

*By Hon. Mr. Motherwell:*

Q. Was that in 1929?—A. That is right now—May 11, 1934. I also want to call attention to an item that appeared in a little trade paper called *Brabender News* recently. Before doing that, I might give you some idea of the dough-testing instrument in the interests of which this trade paper is published, by saying that the Grain Research Committee through co-operation with the Grain Board Laboratory at Winnipeg sent a questionnaire to 95 cereal chemical laboratories in Belgium, France, Denmark, England, Holland, Hungary, Germany, Latvia, North Africa and New Zealand, for the purpose of finding out what kind of instruments they use in testing the dough qualities of flours. I shall just read you one or two sentences from a report compiled by Mr. T. R. Aiken of the Grain Laboratory of the Board of Grain Commissioners:—

When sufficiently large samples of wheat are available, dough testing instruments are used for the selection and purchase of domestic and foreign wheats and there is fairly general agreement that the Brabender, Chopin and Buhler machines are sensitive enough to differentiate between Atlantic and Pacific Manitobas of corresponding grade and also weak European wheats like French, English and German. It is also claimed by some that the Brabender Farinograph is sensitive enough to distinguish the presence of as little as 2 or 3 per cent of Manitobas in a soft wheat blend, while others believe it is possible to detect differences in flour quality not found by baking.

Further on it mentions: “There is unanimous agreement regarding the value of this instrument (Brabender Farinograph) for determining these characteristics (absorption, dough stability and blending power) with great accuracy.”



Now, this issue of the *News* issued by that corporation happens to have an article on wheat blending in which there is a reference to Garnet wheat. It is under date of December, 1933, and is as follows:—

Several years ago a new wheat variety arrived from Canada. The wheat had shown admirable agronomical characteristics and had the most beautiful looks. The kernels were slightly longer but otherwise looked the same as the finest number 1 Marquis. The name of the wheat was Garnet. The millers grabbed it—and the results were disastrous.

On the last page there is a series of farinographs made of various types of flour including one which is labelled “A very bad No. 2 Northern Manitoba consisting chiefly of Garnet wheat.”

The English journal *Milling*, which is the chief milling journal of Great Britain and Ireland, has from time to time published articles referring to Garnet wheat, which are usually quite critical. I do not propose to read more than a few extracts from articles that have been published in the course of the last year. They published the address of Sir Albert Humphries, to whom Mr. Motherwell made reference, delivered at the World Grain Exhibition and Conference held at Regina last summer, and from that address I take a sentence or two:—

For their own good, producers and sellers generally should do nothing to weaken the confidence of buyers in the genuineness of the article offered. Any temporary gain is but a boomerang. The same thing can be said of any slack interpretation of grading rules, for in competitive markets the ultimate buyer has to reckon, not on the best he may obtain, or even on the average, but on the worst he may have to accept on the contract he enters into.

I quote that because of the well known great variation in the percentages of Garnet wheat which enters into number 2, and buyers are obviously given to making allowance for the high percentages sometimes occurring even though they may not always do so.

Under date of September 22, 1933, I read from an editorial on the wheat agreement:—

Most of the trouble of to-day, so far as the abundance of wheat is concerned, is the concentration, by the growers in many countries, upon the production of high yielding varieties regardless of their quality for milling purposes.

Finally, in the issue of April 14, 1934, I quote from the President's address at the annual meeting of the National Association of British and Irish Millers, London, April 13, 1934, as follows:—

Garnet wheat—Little progress has been made in regard to the protest which the committee made more than twelve months ago with regard to the amount of Garnet wheat contained in Manitoba wheat shipped to this country. The chairman of the Board of Grain Commissioners is submitting to the Canadian parliament certain amendments to the Act containing proposed statutory grades of Garnet wheat. The committee communicated with this gentleman, urging that the matter should be settled before the new standards were made up, as unless this was done and Manitoba wheat continued to arrive containing such large proportions of Garnet wheat, it would react unfavourably on the marketing of Canadian wheat.

*By Hon. Mr. Motherwell:*

Q. Who is that gentleman?—A. The president of the National Association of British and Irish Millers.

Q. Is that a contributed article?—A. It was his address at the annual meeting of the association held last month in London.

Before leaving the evidence from overseas which I am presenting here, Mr. Chairman, I would like to make this remark, that we grow our wheat in the hope of selling it, and when our best customers keep on telling us that unless we change our method of grading they will be forced to use as little of our wheat as they possibly can, it is time for us to do something about it.

A few more facts from our own investigators co-operating with our Grain Research Committee. Dr. Larmour is the cereal chemist at the University of Saskatchewan. When I knew I was going to be called upon to give some information here I wrote him and asked him if he would care to submit a statement bringing the information up to date for the last two years—that is since the last hearing. I shall take time to read only one or two extracts:—

Comparison of Marquis and Garnet in respect to quality: Results obtained from comparisons of Marquis and Garnet grown on adjacent plots in the last two years confirm our earlier conclusions that Garnet is usually somewhat lower in protein and decidedly lower in baking quality than Marquis grown under the same conditions.

By "earlier conclusions" Dr. Larmour means his paper published in the journal called *Scientific Agriculture* in the early part of 1931. It was the paper I called to your attention at the last hearing. It covers his results for the crop seasons 1927, 1928 and 1929, three years. That was included in my previous evidence. Now, he submits some further tables giving the averages up to and including 1933 from 1927, a period of seven years. The places at which he got his samples of Marquis and Garnet which were compared in northern Saskatchewan include Beauval, Churchbridge, Cumberland House, Kamsack, Meadow Lake, Melfort, Muenster, Marcellin, Rosthern, Spruce Lake, Lloydminster, Guernsey. The following are the corresponding places in the southern half of the province: Fox Valley, Indian Head, Kindersley, Loverna, Riverhurst, Saskatoon, Shaunavon, Scott, Swift Current, Tugaskie, Wawota, Weyburn. Now, with regard to those places I have mentioned in the northern area the average for that period of seven years at all those places—the grand average—is Garnet 95 per cent of the protein of Marquis; and for the southern area for the same period Garnet had an average of 98 per cent of the protein content of Marquis. That is the point we called attention to earlier, that on the whole the tendency for Garnet to fall below Marquis is greater in the northern area.

In regard to baking quality, Dr. Larmour says:—

All the evidence obtained in this comparative study points decidedly to the conclusion that the quality of Garnet protein is poorer than that of the corresponding Marquis. Baking data with the 0.001 per cent bromate formula was obtained for each of the seven crops represented. These are summarized in table 2. They show that in a very great majority of the cases, the Garnet was inferior to the Marquis, even in those cases in which it was higher in protein. This difference in baking behaviour is accentuated by the blend-bromate formula and even more so by the malt-bromate-phosphate formula which was used first on the 1932 samples. The data in table 3 indicate that the Garnet is too "tender" to tolerate this sort of treatment. With the M-B-P formula, which has been tentatively adopted by the Grain Research Committee as the best for differentiating strong and weak wheats, the Marquis samples generally responded positively while the Garnet samples were very severely "knocked down". This resulted in an extremely wide spread between these two varieties in respect to loaf volume.

I might say in explanation of these baking formulae, that in addition to making an ordinary straightforward baking test of these flours we treat them in a variety

of ways to find out their reserve strength, having in mind that our wheats are grown chiefly for export and that the exporters buy them because of their great strength in order to blend them with their weaker local wheats. It becomes a matter of great importance that our wheats should not only bake a good loaf by themselves but should have great reserve of strength to bring up the quality of weaker wheats. These various formulas are devised to give the gluten a shock to see whether it will stand up to strong treatment. I do not think it is necessary to read his whole report, Mr. Chairman, but his concluding paragraph is as follows:—

On the basis of these and other tests conducted over a period of seven years, we conclude that Garnet is most decidedly inferior to Marquis grown under similar environmental conditions, and that it is not in the best interest of the Canadian export grain trade to permit it to be mixed with the standard grades.

I noticed in the evidence given you a couple of weeks ago the suggestion by Dr. Donnelly that there should be some definite information given to you with respect to gluten quality and protein percentage of these various wheats, and it was partly because I noticed that that I brought forward this information. I think he also called attention to the fact that some of the reports—most of the reports from overseas—referred chiefly to the conditioning difficulty, the difficulty of satisfactorily processing Marquis and Garnet when they are mixed, and in some other instances the objection was to the strength. I think that can be satisfactorily explained partly by the fact that different lots will vary in their quality depending on their origin, with regard to place and year of growth, and also on the percentage which has entered into the particular mixtures which came into question. This processing difficulty will always be present if there is any appreciable percentage of Garnet there, but its lack of reserve baking strength will not become noticeable unless it is present in substantial proportion, and therefore different people with different lots would obviously be impressed by different points.

Dr. Larmour sent me in a more or less private way—but I think I should give them to you—some tests of a few samples of wheat by this Brabender instrument I have referred to. The representative of the Brabender corporation, which is a German corporation, was in Minneapolis, and wrote to Dr. Larmour asking him to supply him with some representative samples of the western Canadian crop, and Dr. Larmour, knowing about this instrument of course, and thinking at the same time to get some information from his own point of view, sent a carefully selected list of samples, including three from Beauval in northern Saskatchewan, of Marquis, Garnet and Reward, and three from the southern part of the province, and this is the report on that subject. I think I shall just read one or two sentences as the whole report will be too long. He sends the diagrams such as I just showed you on the back of that journal a moment ago:—

The enclosed Farinograph diagrams show, of course, that the Garnet is very weak and the Marquis and Reward strong, facts which we had already learned from our bromate baking test.

It must be admitted, if we are to place any faith in the Farinograph diagram, that the low protein Garnet does behave more like an average Australian or Barusso than like a Hard Red Spring. If my interpretation of the meaning of these diagrams is correct, the low protein Garnet is much inferior to the Marquis and the Reward grown under the same conditions.

Q. What is that gentleman's name?—A. Dr. Larmour of the University of Saskatchewan. Dr. Geddes of the University of Manitoba who has co-operated with us for several years has been taken over by the Board of Grain Commissioners and is in charge of their laboratory. I am not quoting anything from



him as, presumably, the chief commissioner could present the information for Dr. Geddes. The other laboratory is in the University of Alberta. I did not write to Dr. Aamodt, who is in charge of that laboratory and ask him for a statement because I was already fairly familiar with what they are doing, but he wrote me a letter on the subject a short time ago, and one paragraph I think would interest you because of a question introduced a couple of weeks ago, I believe by Mr. Motherwell, suggesting that there should be more information from the miller and not so much from technical experts. Dr. Aamodt refers to this subject as follows:—

At various times in the past I have heard or read a statement to the effect that it was the big millers of Canada who were fighting Garnet wheat. From contacts we have made during the past winter it appears to us that probably the small millers object to Garnet wheat even more than the large millers.

He was not writing on the milling of Garnet wheat, but this incidental statement I thought might interest you.

Q. I think that is the general experience; the small millers have not the experience?—A. From a report on cereal tests by Dr. Aamodt, in a leaflet published last fall, I shall quote you the average yields at Edmonton of Garnet and varieties which might be used to replace it, for a period of eight years including 1933: average growth period in days for Red Bobs 103, Garnet 101, Reward 101. The growth period of Reward is the same at Edmonton on the average as Garnet although there is a slight difference between Reward and Garnet at some other places. Now, in the matter of yield for the same period of eight years Red Bobs shows 48 bushels per acre, Garnet 44 bushels, Reward 40. That is on experimental plots. In regard to strength of straw, Red Bobs had 1 per cent of lodging, Garnet 18 per cent of lodging, and Reward 5 per cent of lodging. And he makes the remark:—

Garnet is sometimes slightly earlier than Reward, but this advantage scarcely offsets the higher grade obtained by Reward. When Reward is sown at a rate of one to two pecks per acre heavier than the regular rate for other varieties there is usually little difference between it and Garnet either in yield or maturity.

*By Mr. Davies:*

Q. Is there any information as to how much he seeded per acre?—A. He does not say, but I know the usual rate.

Q. Would the same amount be seeded for each of these tests?—A. Yes, at the same rate; but he suggests that that difference of four bushels could be narrowed up by seeding Reward a little heavier. It would be about 1½ to 2 bushels. That is the rate they use in that part of the country.

Hon. Mr. WEIR: I would like to hand to the committee the figures I spoke of the other day so that they may be printed in the record.

STOCKS IN STORE AT JULY 31

	1930		1931		1932		1933	
	No. 1 Nor.	No. 2 Nor.	No. 1 Nor.	No. 2 Nor.	No. 1 Nor.	No. 2 Nor.	No. 1 Nor.	No. 2 Nor.
Pacific Coast Elevators.....	2,848,105	2,387,535	1,789,676	2,855,226	2,321,055	2,367,881	2,707,616	2,724,360
Fort William and Port Arthur and Eastern Eleva- tors.....	29,036,875	12,613,434	20,310,311	15,317,212	26,250,986	28,750,922	77,081,062	7,944,620

The committee adjourned to meet Thursday, May 31st, at 11 o'clock.









SESSION 1934  
HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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THURSDAY, May 31, 1934

No. 9

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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WITNESSES:

Dr. Robert Newton, National Research Council of Canada.  
Mr. Lew. Hutchinson, Vice-President, Alberta Wheat Pool.  
Mr. L. C. Brouillette, Vice-President, Saskatchewan Wheat Pool.  
Mr. A. W. Alcock, Chemist, Western Canada Milling Co., Winnipeg.





# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

THURSDAY, May 31, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 a.m.

Mr. Senn, the Chairman, presiding.

*Members present:* Messieurs Blair, Bowen, Brown, Carmichael, Donnelly, Garland (*Bow River*), Golding, Hall, Loucks, Lucas, McKenzie (*Assiniboia*), Motherwell, Mullins, Myers, Perley (*Qu'Appelle*), Pickel, Rowe, Senn, Shaver, Simpson (*Simcoe North*), Sproule, Stewart (*Lethbridge*), Stirling, Sutherland, Swanston, Taylor, Totzke, Vallance, Weir (*Macdonald*), and the Hon. Mr. Weir, Minister of Agriculture—(30).

The committee resumed consideration of Bill 53, An Act to Amend the Canada Grain Act,

Dr. Robert Newton, National Research Council of Canada, recalled, examined and retired.

Mr. Lew Hutchinson, Vice-President, Alberta Wheat Pool, recalled, examined and retired.

Mr. L. C. Brouillette, President, Saskatchewan Wheat Pool, recalled, examined and retired.

Mr. A. W. Alecock, Chemist, Western Canada Milling Co., Winnipeg, called, examined and discharged.

In attendance: Mr. E. B. Ramsay, Chief Commissioner, Board of Grain Commissioners, Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

The committee then adjourned to meet again on Tuesday, June 5, at 11 a.m.

WALTER HILL,

*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

May 31, 1934.

The Select Standing Committee on Agriculture met at 11 o'clock, Mr. Senn, presiding.

Dr. ROBERT NEWTON, recalled.

*By Hon. Mr. Motherwell:*

Q. Now, here is a statement made in connection with some investigation in 1932 in connection with overseas shipments in which Mr. Newman and Dr. Birchard were interested. I find this in your evidence:—

In connection with that overseas shipment, I had personal opportunity to interview quite a number of the parties who tested the wheat. I happened to be over in Europe on another mission in connection with the grading of wheat and visited very much the same people. The question of Garnet naturally came up frequently and I made notes in my pocket notebook at that time. When I was asked to give evidence at this hearing I had those notes abstracted just exactly as I made them without any editing, and I think they would be interesting to this committee.

I presume that was quite by accident?—A. No, it was not by accident; it was at the request of this committee.

Q. Which committee?—A. This committee.

Q. That you followed around after Dr. Newman and Dr. Birchard?—A. Oh, no. It was at the request of this committee that I went to Europe to investigate the protein grading problem and I had to see the same people.

Q. Dr. Newman had just investigated the protein question a month before and was on his way back?—A. I did not know he had that commission; I thought he was on the Garnet wheat problem.

Q. We thought you were on protein, but apparently you were on Garnet wheat:—

The question of Garnet naturally came up frequently and I made notes in my pocket notebook at that time. When I was asked to give evidence at this hearing I had those notes abstracted just exactly as I made them without editing, and I think they would be interesting to this committee.

That is this committee on agriculture. This is information you picked up unofficially through the same people that Dr. Newman saw?—A. It was information of a kind I thought this committee was interested in having.

Q. I want to see what amount of value we can attach to these loaves and fishes—there are no fishes, but there are loaves—by what you were doing in Europe. You were just wandering. Were you under any instruction to go to Europe and to look into the Garnet question and to see if Mr. Newman and Dr. Birchard were doing the thing right, or what?—A. I was under instruction to go to Europe, and these instructions came from parliament.

Q. From Dr. Tory?—A. Well, yes, from Dr. Tory, who got his instructions from parliament.



Q. That is good enough. I would like to say that I have not come across those instructions but I find in your own recital that you followed pretty closely in the footsteps of Mr. Newman and Dr. Birchard who were officially appointed scientists—or are they scientists, from your viewpoint?—officially appointed scientists of the Department of Agriculture and the Department of Trade and Commerce respectively. And here is what you picked up by hearsay—not conclusive evidence at all and not given on oath—and retailed to this committee as evidence. There is a whole list of interviews here; none of very much use for Garnet. I do not know on what basis you picked them out, but here are some of the gentlemen interviewed: Dr. A. E. Humphries, Mr. Walter Allen, Mr. W. H. Raylor, Mr. Harry L. Webb, Mr. J. H. Green. Just to see the perversity of it, Dr. Newton was criticizing the irregularity or complexity or contradictory nature of some of the evidence in Mr. Newman's report. Now, see what he says in his own report. This is Mr. Green's opinion:—

It is a poor grasser, and very "hidebound" but the colour is not objectionable. Could probably be used up to 25 per cent in mill mixtures.

Now, that is from Mr. Green, manager of the Co-operative Wholesale Company of London.

The very next witness gives a good example of uniformity in reports, with a query after "uniformity"—Dr. Fisher. Speaking of Garnet he says:—

The dough is stable but short (a common combination). The kernel type of wheat is unimportant except as it affects flour yield. Colour is very important and must either be white or capable of being bleached.

Mr. Green says colour of Garnet Flour is not important. This witness says it is important. So you see what value may be attached to a great deal of this evidence. Dr. Kent-Jones was the next:—

K. J. welcomed the advent of Garnet wheat as another kind available for special purposes in blending, but on account of its distinctive characteristics advised that it should not be mixed with Manitobas.

They nearly all give that testimony. Why should they do otherwise? Why should a miller want to put himself to the inconvenience of doing what somebody else could do for him and run all the risks in transit, because it is pretty hard to ship any variety—as a matter of fact, this Garnet shipment variety was all bagged. We were not taking any chances. We sacked the whole 6,000 bushels and would not take any chance in sending it in bulk.

Then the chairman says:—

Doctor, you have not the reports from which that is summarized that you could file with the committee, have you?

He wanted to know if Dr. Newton had anything to file. The witness replies:—

These are not summarized notes; they are the original notes which I made in my pocket notebook at the time I had the interview with each gentleman.

Now, I am citing this, Mr. Chairman, to show what value we are to attach to these exhibition charts. Dr. Newton says it is not conclusive, although he did not say that until I asked him. Dr. Newton follows up Mr. Newman all over Europe to nearly all the places he went officially, and Dr. Newton recites this chit-chat he picked up over there before this committee as evidence.

Then, here is some more:—

Another point they emphasized unanimously was the importance of constancy of grade qualities. They find out at the beginning of the season what is the general average quality of our 2 or 3 Northern and assign it a more or less definite place in their program of mixing for

milling purposes, and if succeeding cargoes of 2 and 3 Northern are not constant in their qualities, or if they vary widely, it throws out their mixing program and causes annoyance. I have run across cases where they had actually bought wheat of a given grade and because it was out of line with the expected qualities of that grade had to sell it again at a loss and buy some other wheat.

Now, we are talking about Garnet. If some genius—I do not suppose my friend Mr. Davies would do it—but if some genius who was opposed to Garnet wanted to garble this he could stop right there where that sentence stops and one would think it was referring to Garnet. He is talking about Garnet, but it is qualified in the next sentence:—

That, of course, was not Garnet wheat, but it illustrates the point.

So it is the same thing with this business of Dr. Newton's. That, of course, is not conclusive, just one experiment after enunciating the sound doctrine that such shipments should cover a number of years, a number of places and a number of scientists.

Q. Here he refers to a gentleman by the name of Green, a miller of Edmonton. He was the gentleman who was reported by Dr. Newton as having had a lot of Garnet grists from farmers. I will read a bit of it:—

Now, with regard to our home market demands, you are already familiar with the Canadian miller's attitude. I should like, however, to cite one experiment conducted by Mr. B. W. Green, manager of the Northwest Milling Company, Edmonton. This experiment was conducted on the crop of 1929-30, the first time that Garnet wheat began to come on the market in real large volume.

Custom milling, as you probably know, has increased during the period of depression. The farmers instead of selling their wheat and buying flour have more and more gone back to the old system of hauling their wheat to the mill and exchanging it directly for flour. In that particular year Mr. Green was exchanging 22 pounds of flour per bushel for Marquis and 20 pounds per bushel for Garnet wheat. In 1930-31 he raised it to 21 pounds for Garnet wheat. That one pound represented from his point of view the real difference in the milling yield in the two varieties.

Now, I might say that I think from the point of view of a large mill with better facilities for handling the wheat to advantage that there would probably be no difference in the milling yield. This example is from the point of view of a small miller. He definitely finds difficulty in milling the Garnet and he says that when it is mixed with Marquis it presents a quite impossible situation, and he cannot handle it at all. The first 3,000 bushels which he milled for farmers—for about 80 or 90 farmers in 1929-30—he required that all of them should take at least part of the Garnet flour in exchange. Most of them preferred to take Marquis, but he required them to take Garnet, and all but two out of the 90 later brought this flour back asking for Marquis flour in exchange and being willing to pay the difference in value because their wives did not like the Garnet flour.

That all comes from Dr. Newton from a man named Green who is a small miller.

The CHAIRMAN: Might I suggest that you are entering into an argument rather than cross examining the witness.

Hon. Mr. MOTHERWELL: I am asking questions now and again. I am reciting facts given by Dr. Newton two years ago regarding a certain matter. I want to know if we are to judge by what is done here. I might say that two

years ago I did not hear much of this—two years ago. I was sitting back far enough that I could not hear much, especially if my batteries were low, but the Minister was kind enough to ask me to sit closer this year. Probably it would be better if I did not hear quite so much. Now, here is a real gem. Apparently, I got the hang of what was going on about this time, and I asked this question and got this answer from Dr. Newton:—

Q. That was the evidence of the millers?—A. Mr. B. W. Green's statement. I may say he made this at a public meeting at the University of Alberta. We were having a farmers' short course at which I was giving a lecture myself on the quality of wheat varieties. There was no special reference to Garnet wheat at all, the lecture was on wheat varieties in general.

That is the third instance of stopping short and leaving inferences and Dr. Newton did the same thing the other day. To me this was a son of a gun of a piece of evidence against Garnet. I asked him if it was conclusive, and Dr. Newton said it was not conclusive. Just the same with this man Green—it was an address he gave, but he did not say anything about Garnet yet Dr. Newton arrived at conclusive reason. I will stop now.

Q. There is one other point; I do not know whether Dr. Newton could throw any information on it or not: it appears from letters written in 1932 that certain millers in Great Britain were complaining quite extensively about Garnet. One fact that I cannot completely reconcile is the fact that from our crop year 1932-33 (that is, ending in July 31, 1933) the United Kingdom millers bought more wheat from us than in any other year in their history?—A. Was that 1932-33?

Q. Yes, of the crop for the year ending the last of July, 1931, they bought about 103,000,000 bushels?—A. Well that of course, Mr. Chairman, takes us into the field of economics, which is not my field. I might, however, suggest this: that it coincided with a period of very high quality in our crop, and with a period with a general level of very low prices. A situation of that sort would surely be favourable to their buying all the wheat they could from us.

*By Hon. Mr. Motherwell:*

Q. Here is one question I would like to ask Dr. Newton: here is your evidence—this is a very creditable piece of evidence, and I do not want to be unfair to Dr. Newton—but this relates to a time when small quantities of Reward were being made available to farmers in 1931 to seed in preparation for seeding on a larger scale in 1932. "If this educational propaganda"—it is a rather suggestive word—"succeeds the problem of providing special grades for Garnet in 1932 may disappear."

Now, if that were so in 1932, it should be more so now in 1934. Is that a natural assumption? What did you have in mind?—A. I think perhaps Mr. Motherwell did not go quite far enough back in that report. He is reading from a report which the Grain Research Committee of the National Research Council issued February 9, 1931. At that time there was much less Garnet wheat in the country than there is now. In that report, we summarized all our experimental data up to that time, and we were fully convinced then that Garnet ought to be graded separately. We made a recommendation that it should be graded separately, but that the farmers should be given warning as to the change coming, that it should not be made that year, and that the report should be made public immediately, so that the farmers would have an opportunity to get small quantities of other varieties to sow that year in order that by the following year, 1932, they would be able to sow their main crop to another variety of wheat. We further went on to say that if the facts about



Garnet were given publicity, the effect would be for the farmers to swing over to Reward or some other variety, and if that were done the whole problem might disappear.

Q. Apparently they did not feel like swinging?

*By Mr. Vallance:*

Q. In your experience have you taken one locality and taken Marquis—I am speaking of the North—taken Marquis grown in that locality, and Garnet grown in that locality, and made a comparison between the two; that is, the flour from the one as compared to the flour from the other—what is the comparison between the two?—A. Marquis is nearly always superior, provided, of course, the grain is reasonably sound; if you take Marquis and Garnet in a year in which Marquis is heavily frosted and Garnet wheat sound, then of course you could not make that particular comparison.

Q. How often would that occur?—A. In our experience we had practically no case of it. Marquis was nearly always better than Garnet.

*By Dr. Donnelly:*

Q. How did they compare as to gluten content?—A. In the Northern half of Saskatchewan, the province where most of our experimental work has been done, for a period of seven years in a dozen places Garnet averaged 95 per cent of the protein content of Marquis. In a dozen places in southern Saskatchewan, Garnet averaged 98 per cent of the protein content of Marquis. There is not very much difference in the south, but they both went down a bit in absolute protein content in the north, Garnet went down more than Marquis.

Q. What is the percentage of gluten content of Reward in the north?—A. It probably would be down about 11 per cent—it would depend on the area.

Q. What is it in the south?—A. Probably 15 or so.

Q. So you have the same lack of gluten content in the north in both?—A. The question of degree comes in there; that is, Garnet fell off more in the north than did Reward or Marquis; some more, not a tremendous amount more, it dropped to 95 instead of 98 per cent of the protein content of Marquis.

Q. You find the same with Marquis?—A. All varieties fall off to some extent in the north.

The CHAIRMAN: Now then, gentlemen, Dr. Newton is anxious to get away. If you are through with him we will have Dr. Newton released.

The witness was discharged.

The CHAIRMAN: Now, we have two witnesses here: Mr. Hutchinson, representing the Alberta pool; and also Mr. Alcock, of the millers. Is it your wish to start with Mr. Hutchinson's evidence first, or do you want to hear Mr. Alcock first.

Mr. CARMICHAEL: I would suggest that we have Mr. Alcock give his evidence; the questions which are put to him may take in both.

The CHAIRMAN: I understand that Mr. Weir is of the same opinion; so, if the committee is satisfied, we will call Mr. Alcock.

Mr. A. W. ALCOCK, chemist, Western Canada Flour Mills Company, Winnipeg, called.

*By the Chairman:*

Q. You are here, Mr. Alcock, representing?—A. The Canadian Millers' Association.



Q. Have you a statement to make, Mr. Alcock?—A. No, Mr. Chairman, I thought at this stage of the proceedings you would have evidence enough about the relative milling and baking qualities of Garnet wheat. It was all gone over very carefully two years ago. I see from the fact that Dr. Newton has been on the stand to-day that you have probably had similar evidence at the sittings of this committee. I can only say, Mr. Chairman, that in 1928 and 1929 the millers, after a careful comparison of Garnet and Marquis wheat, advised the Department of Agriculture that in their opinion it would be better to grade Garnet separately. As the result of a conference that was held in the office of the Minister of Agriculture in 1929, a shipment of wheat was sent overseas; and the consensus of opinion of those who checked up on the experiments was that Garnet should be graded separately. Subsequently the Research Council of Canada in their laboratories in the three Western universities carried out an extensive series of experiments, which showed the relative qualities of these two wheats. Their findings confirmed in every respect the opinions that had previously been expressed by the milling chemists. At the inquiry which was held two years ago these facts were presented.

Q. You gave evidence at that time?—A. I gave evidence at that hearing; at least, I came as technical adviser to Mr. Short (our president). In the interval that has elapsed since that time the millers have seen no reason whatever to change their opinion with regard to the separate grading of Garnet wheat; and in the interval a certain amount of criticism has come forward, I understand, from the British and Irish Millers' Association and other organizations who are concerned with the reputation of our wheat overseas, including the Grain Standards Board, and they have recommended once more that this wheat be separated. The opinion of the millers is, as I say, exactly the same as it was two years ago and five years ago. We still believe this wheat to be distinctly inferior, and we still believe it is reducing the quality of shipments overseas, and injuring the reputation of our wheat in world markets.

I do not know, Mr. Chairman, that I could offer any further technical evidence. If there is any question which any member of the committee wishes to put to me as a mill chemist, I shall be only too glad to answer it, if I possibly can. I can say that we have made several attempts at milling Garnet wheat, and our results have invariably been unsatisfactory.

*By Hon. Mr. Motherwell:*

Q. You do not use any of it in your flour?—A. We use a little now; we can scarcely avoid that.

*By Mr. Brown:*

Q. Have you made any experiments with respect to milling separately?—A. Only on an experimental scale.

Q. Not in bulk?—A. No.

*By Hon. Mr. Motherwell:*

Q. You do not use any for commercial purposes?—A. Yes.

Q. What percentage in the mix would it be?—A. In our mills at St. Boniface we use, perhaps 5 per cent, perhaps 10 per cent, certainly not more than 10 per cent.

Hon. Mr. WEIR: Do you buy that separately to blend?

*By Hon. Mr. Motherwell:*

Q. Would that have any appreciable effect in it?—A. It is very difficult to detect in such small quantities.

*By Mr. Donnelly:*

Q. What are the notable features?—Principally two; it is different from Marquis with respect to milling quality, and it is inferior with respect to baking quality and in colour.

*By Hon. Mr. Weir:*

Q. Do you buy Garnet separately, and blend up to 10 per cent?—A. At our St. Boniface mill we go to the grain trade and ask them to ship in so much No. 2 Northern, so much No. 1 Northern, specifying that the Two Northern shall contain no Garnet.

Q. If Garnet were graded separately, would you use it as a blend for mixing to any considerable extent?—A. I doubt whether we could use it to any considerable extent, Mr. Weir.

*By Hon. Mr. Motherwell:*

Q. You know the law in the Old Country, providing for the millers to grind a certain amount of their home wheat?—A. I do not know much about it.

Q. You know there is a law in the Old Country compelling a certain percentage of home wheat in their grinding mix?—A. I do not think they have to grind any certain percentage of their home-grown wheat.

Q. You don't think so?—A. Not in England; but in France and Germany, yes.

Q. There is no law like that in Canada?—A. No.

Q. There is no law compelling you to buy Garnet wheat then?—A. No.

Q. Then why do you want to buy it and then raise trouble about it? Are there not many other grades better than Garnet, better than No. 2 Northern; there are many other grades, No. 1 Hard, No. 1 Northern and No. 3 available to you?—A. We grind a lot of No. 1 Northern.

Q. Well, if you can get all you want of No. 1 Northern why do you make so much trouble about the No. 2 Northern; it is being bought by somebody, there is no great congestion of No. 2 Pacific or No. 2 Atlantic that I know of; indeed quite the contrary; what is the point about all this trouble when No. 1 hard and No. 1 Northern and other grades are available for you.—A. I do not know that the millers are making so much trouble, are they?

Q. What are you here for then?—A. I was simply asked to come here to give the committee any information I could from the point of view of the domestic miller.

Q. You are a chemist?—A. I am a chemist.

Q. Oh, well, we get lots of funny and contradictory things from chemists. I have no further questions to ask.

The CHAIRMAN: Are there any further questions on the part of the committee? If not, we will thank Mr. Alcock and ask him to retire.

The witness was discharged.

Mr. L. HUTCHINSON, recalled.

*By Mr. Davies:*

Q. Yesterday Mr. Hutchinson stated that the reason for the narrow spread at Vancouver at the time it existed was the extra amount of Marquis that existed in that particular year. I have figures that indicate that in 1931 the amount of Garnet was 61 per cent, in 1932 it was 64 per cent, and in 1933 it was 65 per cent; which would indicate that it would not be for that reason. You might remember, Mr. Hutchinson, that we were discussing the question as to whether or not the spread between No. 1 and No. 2 ex-Vancouver was less than the spread on No. 1 and No. 2 ex-Atlantic; you mentioned that you

thought it was because there was more Garnet in it, as a matter of fact there was more Garnet in it?—A. Are those the percentages that apply to the wheat ex-Vancouver?

Q. That is the percentage that was Garnet?—A. In the whole of the Vancouver shipments?

Q. No, of the crops.

The CHAIRMAN: I might ask members of the Committee not to leave, because we have an important question to decide about the evidence taken in camera and the amount of that evidence which is to be deleted from the transcript. That was not decided yesterday.

*By Mr. Davies:*

Q. Would there be any other factors that would apply there?—A. Those are the figures for the entire Canadian crop. I would say yes, because that affects Fort William as well as Vancouver, but it does not tell you what the percentage of Garnet at Vancouver was.

The CHAIRMAN: Are there any further question? If not, Mr. Hutchinson is released.

The witness was discharged.

Mr. DAVIES: I would like to move that Mr. Carmichael's suggestion be adopted. We have a very capable clerk who has been present at our sessions and who knows what Mr. Carmichael referred to, and he could read the evidence and decide what portions could be deleted.

The CHAIRMAN: May I say that no doubt the clerk will be consulted by Mr. Brouillette and Dr. Newton.

Mr. DAVIES: Mr. Brouillette has some figures which he desires to put into the record.

The CHAIRMAN: We can recall Mr. Brouillette.

Mr. L. C. BROUILLETTE, recalled.

The WITNESS: The question was raised by Mr. Davies and others as to what our experience is in sales to domestic mills in areas in the provinces from which shipments are made. Since the question has been raised, I have made further inquiries of our sales department—the Winnipeg office of the Pool Elevators—and I am informed that during the current year our sales from the north, west of a line drawn, say, from Prince Albert to Moose Jaw, are about 30 per cent; the central portion of the province is around 45 per cent; the balance is from the southern part. With that information, having in mind the evidence given before, even at that where too much Garnet is produced at certain shipping points millers ask that selections be made. Shipment west of the line as mentioned is because it does not necessitate the back haul but can come from the country elevator points in a direct line with mills. Eastern shipments are made, as I understand, pretty well on the same basis. In other years it may vary, but I think, approximately, that would serve as a guidance.

Mr. DAVIES: I think when I gave some figures in respect to the percentages of Garnet wheat some of the members understood that I meant the whole Canadian crop. What I meant were the percentages of Garnet ex Vancouver. I gave figures for 1931, 1932 and 1933 which were respectively 61, 64 and 65 per cent.

The committee then proceeded to discuss sections 3 and 4 of the Bill.











SESSION 1934

HOUSE OF COMMONS

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SELECT STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION

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MINUTES OF PROCEEDINGS AND EVIDENCE

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TUESDAY, JUNE 5, 1934

No. 10

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Reference,—Bill No. 53,  
An Act to amend the Canada Grain Act

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## WITNESSES:

Dr. L. H. Newman, Dominion Cerealists.

Dr. Robert Newton, National Research Council of Canada.

Mr. E. B. Ramsay, Chief Commissioner, Board of Grain Commissioners.

Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners.

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1934





# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS,

TUESDAY, June 5, 1934.

The Select Standing Committee on Agriculture and Colonization met this day at 11 o'clock in the forenoon, Mr. Senn, the Chairman, presiding.

*Members present:* Messieurs Barber, Blair, Bowen, Boyes, Brown, Burns, Carmichael, Davies, Dupuis, Garland (*Bow River*), Gobeil, Golding, Hall, Loucks, Lucas, McKenzie (*Assiniboia*), Moore (*Chateauguay-Huntingdon*), Motherwell, Mullins, Senn, Smith, Stirling, Taylor, Totzke, Vallance, Weese, Weir (*Melfort*), Weir (*Macdonald*), Wilson—29.

On Motion of Mr. Vallance,—

*Resolved*,—That the evidence heard by the Committee on May 29, and May 30, and revised by Dr. Robert Newton, Mr. L. C. Broulitté, and the Clerk of the Committee be printed.

The Committee resumed consideration of Bill 53, An Act to amend the Canada Grain Act.

Dr. L. H. Newman, Dominion Cerealists, called, examined and retired.

Dr. Robert Newton of the National Research Council of Canada, called, examined and retired.

Mr. E. B. Ramsay, Chief Commissioner, Board of Grain Commissioners, called, examined and retired.

Mr. C. M. Hamilton, Commissioner, Board of Grain Commissioners, called, examined and retired.

The Committee adjourned to meet at 11 o'clock on Thursday, June 7.

WALTER HILL,

*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, ROOM 429,

June 5, 1934.

The select standing committee on agriculture met at 11 o'clock, Mr. Senn presiding.

The CHAIRMAN: Order, gentlemen. Mr. Weir wishes to make a short statement.

Hon Mr. WEIR: There has been some doubt as to the advisability of transcribing certain evidence or a portion of certain evidence that has been given before the committee. I find myself in accord with the recommendations of the sub-committee that the evidence of Dr. Newton, Dr. Tory and a part of the evidence given by Mr. Brouillette, was a sound recommendation, although at first I was inclined to disagree. With regard to the evidence given by Dr. Newton, we have found it very interesting and very enlightening, but I think the fact that he himself stated that his evidence was not sufficiently conclusive is ample reason for us not including it in the printed records of the committee. I would like to direct attention also to the evidence of Mr. Brouillette and to his request that the evidence he gave in connection with shipments of wheat out of Fort Churchill also be not considered as evidence because it was not a statement of fact, but rather a conjecture.

The CHAIRMAN: I understand that Mr. Brouillette and Dr. Newton in conjunction with the clerk of the committee have revised the transcript and if the committee is agreeable to allow their revision to stand it would be wise to have the evidence printed. What is the wish of the committee in that respect.

Hon. Mr. MOTHERWELL: The first day that this was mentioned I was disposed to disagree with the whole camera business, but now that we have seen its operation I am disposed to think that a lot of that evidence should not have seen the light of day. It is not conclusive. What we may say here may pass off, but what is done officially is there for all time. I am inclined to think that in the case of this evidence the tail should go with the hide—it should all go out.

The CHAIRMAN: There can be no question about including the evidence of Mr. Hutchinson. I do not think it would be wise to delete Mr. Hutchinson's evidence.

Hon. Mr. MOTHERWELL: I do not think it will make much difference. Is that the only exception?

Mr. VALLANCE: Mr. Chairman, I move that the evidence as revised be accepted by this committee.

Carried.

Mr. BROWN: Before we go on with to-day's evidence I would like to call attention to a statement of mine which I would like to have corrected. It appears on page 192 in the evidence of Tuesday, May 29th, and I am reported as saying:—

There has been yet no person come forward to prove that Marquis and Reward cannot be satisfactorily milled together. That fact separates it entirely from the other fact that we have evidence that Garnet and Marquis cannot be satisfactorily milled with other wheats. . .



Now, what I intended to say and what I should have said was that that fact separates it entirely from the other fact that we have evidence that Garnet and Marquis cannot be satisfactorily milled together. We know that Marquis, Red Bobs and Reward can be satisfactorily milled together, but Garnet does not satisfactorily mill with the others. That is what I intended to say.

The CHAIRMAN: That will be taken down in the minutes

Now this morning we are in receipt of a letter from Mr. Wieland of the Co-operative Wholesale Society Limited in reply from a letter to Mr. Hill, the clerk, with a list of questions submitted by Mr. Davies recently. This letter is very short; perhaps I had better read it:—

My assistant, Mr. R. T. Jackson, has handed me your letter of June 1st, together with list of questions submitted by Mr. Davies, M.P.

Owing to the fact that this Depot is merely a Buying-Office and in the interest of your investigation, I feel that it would be proper, should you feel that these questions must be answered, if you would forward them to Mr. A. H. Hobley, Co-operative Wholesale Society Ltd., 28 Brunswick Street, Liverpool, 2, England.

Mr. Hobley is Manager in charge of our wheat buying office in the United Kingdom.

I may say that I am unable to answer any of the questions.

Yours very truly,

W. L. WIELAND,  
*pro. Society.*

I do not know whether it would be the wish of this committee that these questions should be cabled to the old country. It will probably take some time before they are answered, and I think it is the disposition of this committee to dispose of this Bill this week if possible. However, whatever the committee decides to do will be done.

Mr. VALLANCE: Were the questions read into the record?

The CHAIRMAN: Yes. Perhaps we had better let the matter stand until we hear Dr. Newton.

Mr. VALLANCE: What does Mr. Davies think himself?

Mr. DAVIES: I would be prepared to let the matter stand for the moment, Mr. Chairman.

Mr. L. H. NEWMAN, recalled.

*By the Chairman:*

Q. Have you any further statement to make in regard to this matter of the grading of Garnet wheat?—A. No. I have nothing special.

Q. You have nothing special?—A. No, except that there might be some observations coming out of the discussion.

Hon. Mr. WEIR: I think if Mr. Newman has anything to add we would like to hear it.

The WITNESS: Mr. Chairman and gentlemen, I have not anything specific to add to what evidence has been given to date. I might possibly make a few observations, partly by way of review. I think, at the outset, after the investigation overseas was completed the great majority of us, at any rate, were agreed that theoretically the thing to do was to grade this wheat separately. Then, certain complications arose which seemed to make it rather doubtful as to the wisdom of taking that step. In the early stages I was personally very keen on

having it graded. I think Mr. Ramsay and I visited the department one time, and I was rather keen on having it done. He was of the opinion that there was not yet enough Garnet in the country to warrant taking that step. I felt that if we were ever going to grade Garnet separately the time to do it was before we had too much in the country, and I felt from what I knew of the wheat that that wheat was going to spread across quite an appreciable territory and sooner or later would be concerned pretty definitely with the question of separate grading. Time passed. A large number of people got into this wheat and the investigation overseas undoubtedly showed that practically all of the overseas people favoured the separate grading of Garnet.

When I gave evidence here in 1932, for the sake of argument I took the ground that it did not appear as though the time was quite ripe. The other day I stated that the time was probably very much riper now than it was at that time. For those two reasons—first that we have now in the country a large quantity of Reward and a better Reward than we had two years ago; that seed is now readily available—we have discovered and our farmer friends have discovered that they can get much better yields in the north country—and it is the north we are talking about chiefly because we do not need to consider these early wheats farther south very much—are getting very much better yields than they did when sown more thickly. Taking it on our experimental farms throughout the west, an average of nine years shows that at some points there is not a very great spread in yield between Garnet and Reward; at some other points the spread is a little greater. However, we are of the opinion if when we have the results over a series of years' tests, when the varieties are sown at their optimum rate of seeding, that the spread in yield will narrow up. At the present time I understand in experimental work all varieties are sown at the same rate. We have, however, under way at the present time a series of trials in which different varieties are sown at different rates of seeding. We do believe, especially on well prepared land and on fairly new land that the spread in yield will narrow up. So, in as far as Reward is concerned, we have now available for the use of many of these people who are growing Garnet a very good substitute, and a couple of years ago that was not the case; there was not really enough to go around; and so those who were growing Garnet had not very much to choose from. Then, we have Marquis coming back very strongly now. Many people who went out of what they thought was Marquis but which contained very little Marquis are no doubt going back into Marquis. Under this crop testing plan which is in use in the west samples have been collected from over one thousand loads. Over 20,000 farmers' material was checked up at about 50 points. There would be a very fine opportunity given to help those people who are growing Garnet to get started off differently if they find they can and believe they can grow another variety satisfactorily.

Now, that is, perhaps, all I need to say about that. It is more or less a repetition of what I said before; but I think from the standpoint of this country as a whole the one thing to keep in mind is that these old country people who undoubtedly are our best customers are still very anxious that we grade this wheat separately; and as I said in my report after the investigation overseas, it is usually good business to give people what they want in the way they want it, and one cannot very well overlook that fact. It seems to me, in the last analysis, in view of all that has been said and written, that one cannot help thinking that the time is ripe when something very definite should be done.

When the matter of separate grading was up two years ago it was suggested that this wheat be penalized by upwards of 8 cents per bushel. The suggestion was made by one of the previous witnesses that if the spread as between, say, 1 Garnet and 1 Northern could be narrowed down to around 3 cents it would mean very little hardship if any on the Garnet grower. If that wheat could be placed on the option to start with, at any rate, on a very small margin so that

it would not, at the outset, get a black eye or give a wrong impression, I do not think the grower of Garnet would have very much to complain about to-day. If on the other hand, we start with the spread which was suggested before it would be quite a different thing—the wheat would be damned at the outset.

Now, our millers, both in Canada and in the old country, have learned a great deal about this wheat; and I think, at least from the last analysis, that what they want chiefly is that that wheat be graded separately. They know the wheat has certain peculiarities and on the whole it is not as good a wheat as Marquis. I made that quite clear in our Garnet Bulletin in 1927, and we have not changed our opinions one iota on that matter. It is a fairly good milling wheat. In some districts it is just as good as Marquis. But on the whole it is a little inferior in some respects to Marquis; and in some places it is distinctly inferior. I think, however, as far as the old country people are concerned, that the important point is that it mills differently, and they would like to have it separated for that reason. No doubt, a good many of the complaints we have heard from overseas—although there have not been so many after all—are not very well founded; but a cereal chemist told me in 1929, "Unless you grade this wheat separately, now that they have been talking so much about it, if anything goes wrong with any shipment, the blame will immediately be placed on Garnet." That was one of his arguments in favour of separate grading. It has been suggested that further shipments be sent over; I think it was Dr. Sword of the Scottish Co-operative, with whom I was in correspondence regarding this matter, who urged against that. He said, if you send a specific shipment they will find all sorts of things wrong with it, and perhaps it will do the wheat more harm than good. He did not think, at any rate, that there would be very much gained by a separate shipment. They have been co-operating with us by sending samples for growing tests, in order that we might determine for them how much Garnet was present, so that they could correlate the results of their tests with ours. It was, in the opinion of these Scottish co-operative people, that that would be the better way to do than to send over a specific shipment. However, that is simply passed on as the observation from a representative miller from the other side.

I do not think, Mr. Chairman, there is anything very much further that I could add.

The CHAIRMAN: Are there any questions?

*By Mr. Carmichael:*

Q. With regard to the variety or varieties that you mentioned that are being developed to take the place of Garnet in the North, have you any information as to their milling qualities when mixed with Marquis?—A. So far, they are very fine. We have some produced from a Garnet-Reward combination, which should make pretty nearly an ideal wheat.

Q. And you have information as to how it mills when mixed with Marquis?—A. No, not yet; but we are pretty sure from the way it behaves—it mills very much like the Reward parent.

Q. There is sufficient of that wheat in sight now to take the place of Garnet?—A. Not of that. I was speaking of Reward-Marquis entirely. You will understand that in the development of these hybrids it takes a long time. They must be tested in a very exacting manner; and that will take some few years yet, although they are being pushed forward as rapidly as they can be. We have got along quite rapidly, thanks to the greenhouses which were provided for us some years ago, but it will be some little while. I would not say that they will solve the immediate problem, but ultimately I think likely both Garnet and Reward would pass out of the picture in view of what is going on.

*By Mr. Brown:*

Q. Did you find, Dr. Newman, in your visit to Europe and the United Kingdom, that there was the danger of our certificate final being refused, or



jeopardized in any way, because of the inclusion of Garnet?—A. Well, when I was there they did not speak so much about that; as some one mentioned the other day you will always find lots of complaints; but that had not been presented as an argument at all at that time.

*By Hon. Mr. Weir:*

Q. Could you give us the comparative yields, Dr. Newman, between Marquis, Garnet and Reward, with the number of bushels seeded on the experimental farm under ideal cultural conditions?—A. Yes. At the farm at Scott, which is up in the Battleford area, the difference is not significant between Reward and Garnet on highly tilled land. At Lacombe, the farm in Alberta, the average of nine years places Garnet about 8 bushels ahead of Reward.

Q. What is the difference at Scott?—A. Practically none at Scott. Up at Beaver Lodge in the Peace River country the difference is not so very pronounced, a little in favour of Garnet.

Q. Was the same amount of seeding used in each case?—A. Was the same amount of seeding used in each case: I think we should keep in mind in discussing yields that when we use the optimum rate of seeding per variety that this difference will narrow down appreciably. Reward undoubtedly is not as good a rustler as Garnet is under similar conditions, it will not fight weeds as well, and it will not tiller as well.

*By Mr. Vallance:*

Q. In other words, it is not a dry weather wheat?—A. No.

*By Hon. Mr. Weir:*

Q. What do you find the best quantity of wheat to seed for Reward?—A. Two bushels per acre, about half a bushel more than Garnet. Garnet can be sown really less than Reward. Reward should be sown appreciably more.

*By Mr. Vallance:*

Q. How does the yield compare between Scott and Lacombe?—A. The yields at Lacombe are much higher. I have the actual figures here, if you would be interested.

*By Hon. Mr. Motherwell:*

Q. Do you think that the buyer of No. 2 Pacific is getting good value for his money?—A. Yes, I think he is; I think on the whole he is.

Q. Well, in spite of that they are then just for the sake of harmony and peace disposed to think that the time has come now that Garnet is sufficiently well known that it can stand on its own feet, in spite of the fact that it might have been hurt badly a few years ago it would not be hurt much now because it has become known?—A. I think, as really was pointed out before by a number of people, at least it was pointed out, that if this wheat can not stand on its own, it should go. But those of us who are familiar with the wheat believe that the time has come to submit it to that test, possibly; sooner or later it will have to stand the test.

Q. Well, Mr. Chairman, I must say I have never been under any delusion as to what will happen to Garnet when it is put on its own; and I have always faced that inevitability, and I do not know whether Mr. Newman just realizes, as I think I do realize it. There is another incidental feature that has grown up, that is, the newspapers bore the very interesting news the other day that Sir Charles Saunders was knighted for establishing four wheats; Marquis, Ruby, Reward and Garnet. Well now, if he has been knighted for establishing Garnet, we will have to be careful how we unknight him.



Mr. CARMICHAEL: Is that right, Mr. Motherwell, did he establish Garnet?

Hon. Mr. MOTHERWELL: Perhaps the one who kills it will be qualified for knighthood also; will that be the minister of trade and commerce, or who?

The CHAIRMAN: Don't ask me.

Mr. VALLANCE: The Chairman of this Committee.

Hon. Mr. MOTHERWELL: There is somebody evidently building up a title for himself in killing this wheat that Sir Charles Saunders was knighted for establishing.

The CHAIRMAN: If the committee are through now with Dr. Newman, Dr. Newton has two or three replies to questions that were asked him the other day which he was then unable to answer. Is it the wish of the committee to hear him?

Mr. CARMICHAEL: I would like to ask Dr. Newman: is that right, that Dr. Saunders is the one who originated Garnet wheat.

The WITNESS: Yes, that is quite right.

Mr. CARMICHAEL: That is right.

The WITNESS: Yes.

Mr. CARMICHAEL: I had been told it was, and it was not; I just wanted to be sure.

Hon. Mr. MOTHERWELL: It is official enough, I think, to base my preceding comments upon.

The CHAIRMAN: Very well. What is the wish of the Committee about Dr. Newton?

The witness retired.

The CHAIRMAN: We will ask Dr. Newton to come before us and present his submission.

Dr. R. Newton, recalled.

The WITNESS: Mr. Chairman and gentlemen, I have prepared a short answer to two questions, one of which was directed to me last day and I was not prepared to answer fully at that time. The other was the general question of the Hon. Mr. Weir as to why there was a narrower spread between No. 1 Northern and No. 2 Northern at Vancouver than at Fort William during the period June, 1932, to February, 1933, even with the preponderance of Garnet at Vancouver. I have studied the figures, both those already submitted to this committee and those available in trade journals, and have also consulted officials of the Bureau of Statistics. With the consent of the chairman, I should like to make a submission.

First, I should like to point out in the table submitted by Hon. Mr. Weir and printed on page 101 of the Minutes of May 16, that although there were nine months in which the spread was less at Vancouver, in all but three of these the actual price of No. 2 at Winnipeg was higher than at Vancouver, whereas if they were of equal quality the reverse should be the case because of cheaper carriage facilities out of Vancouver. The three months in which No. 2 was quoted higher at Vancouver were December, January, and February, when no important amount of grain was moving out of Fort William and Port Arthur, as indicated by the lack of quotations in British Trade Journals, and Winnipeg prices were therefore purely speculative.

*By Hon. Mr. Weir:*

Q. Do you mind, Dr. Newton, if we make this clear as we go along: do we gather from your statement this, that with wheat of equal quality at Vancouver

and the Atlantic the Vancouver wheat should bring a higher price than Atlantic wheat because of the cheaper transportation?—A. That was stated in the Committee by another witness the other day while I was present, I think you agreed with it, sir.

Q. But it was also stated by one of the witnesses that there were factors that came in there, that no person could make an absolute statement?—A. Oh, of course, the availability of wheat at a given time, and that sort of thing.

Q. I just wanted to correct the impression you were giving, that that was the only factor; because the evidence that we have had submitted before us was very conclusive that they could not state exactly what were the causes in the difference in the prices of wheat?—A. It may not be possible, of course, to state absolutely; but I got the best opinion I could, and I checked it with the officials of the Dominion Bureau of Statistics and they thought it was sound.

Q. Another point in that connection, so I may get it clear; I think you agreed from evidence submitted that in Vancouver the greater part of the wheat is from the North; at least, a greater part of the wheat is representative of wheat from the north—of that which goes to Vancouver—than it is of wheat from the south?—A. Yes.

Q. The greater part of the southern wheat will go to the Atlantic, and even with the same kind of wheat it has been proven beyond doubt that the wheat from the north—even Marquis—that Marquis is a poorer wheat; which also might account for the lower price at Vancouver?—A. Well, the point I had just made was that during these three months during which No. 2 got a higher figure at Vancouver there was no important movement of grain from the East; therefore, Winnipeg prices were purely speculative. Moreover the market during the second half of 1932 was abnormal. In 1932 there was a crop failure in the Danube. The United States was not exporting wheat. Russian wheat exports were insignificant. Argentine and Australia were well sold out by July, leaving Canada the sole source of immediate supply in volume. We had a good crop of high quality. Prices were at their lowest point. We supplied during that period the largest proportion of the British market we have ever secured in our history. This answers also the question which Mr. Davies asked me last day, and which I was unable to answer fully at that time.

Secondly, I should like to point out that London and Liverpool, c.i.f. prices are a safer basis than Winnipeg prices on which to form a judgment. They represent actual sales and not speculations, and are usually a little higher than Winnipeg Grain Exchange closing prices. Moreover, the Winnipeg market has been partly artificial since 1930, because of controlled operations, and the diversion to it of Chicago operations because of United States government restrictions.

To get London and Liverpool prices we must have recourse to trade journals, and unfortunately those we have consulted do not quote Atlantic and Vancouver prices separately prior to 1930. The inference is perhaps that there was not enough difference in the spreads to make it worth while doing so. The table submitted, giving weekly parcel prices (c.i.f.) at British ports, 1930 to 1933 inclusive, as published in the "London Grain, Seed and Oil Reporter" show that from November, 1930, to the end of 1933 there were only 14 weeks in which the spread between No. 1 and No. 2 was less for Vancouver wheat. Of these, ten were in the period August-December, 1932, the abnormal features of which have already been pointed out. It may be added, further, that for five out of these ten weeks, the price of No. 2 Atlantic was equal to, or higher than, the price of No. 1 Vancouver, obviously an abnormal situation.

PARCEL PRICES (C.I.F. ENGLISH PORTS) PER 480 LB.  
(Compiled from the London Grain, Seed and Oil Reporter)

		Vancouver		Atlantics		Spread 1°-2°	
		1°	2°	1°	2°	Vancouver	Atlantics
1930							
Jan.	3	Not quoted separately.		50/-		1/-	
"	10						
"	17						
"	24	49/9	48/9	47/1½	46/3	10½d.	10½d.
"	31	46/3	45/4½	47/3	46/6	1/-	9d.
Feb.	7	46/1½	45/1½	48/-	47/3	1/-	9d.
"	14	46/4½	45/4½	44/6	43/9	1/-	9d.
"	21	42/6	41/6	44/4½	43/7½	1/3	9d.
"	28	43/3	42/-	42/7½	41/9	9d.	10½d.
Mar.	7	41/4½	40/7½	40/1½	39/4½	7½d.	9d.
"	14	39/1½	38/6	43/3	42/9	9d.	6d.
"	21	42/6	41/9	41/6	40/9	6d.	9d.
"	28	40/9	40/3	44/-	43/1½	9d.	10½d.
April	4	43/-	42/3	44/3	43/6	9d.	9d.
"	11	43/9	43/-	42/7½	41/7½	10½d.	1/-
"	17	41/9	40/10½	41/3	40/9	9d.	6d.
"	25	41/3	40/6	40/10½	40/1½	9d.	9d.
May	2	40/9	40/-	40/4½	39/6	7½d.	10½d.
"	9	40/1½	39/6	41/6	41/-	1/-	6d.
"	16	41/6	40/6	42/3	41/9	9d.	6d.
"	23	42/-	41/3	42/4½	41/7½	9d.	9d.
"	30	41/9	41/-	41/3	40/3	9d.	1/-
June	6	41/10½	41/1½	39/3	38/4½	10½d.	10½d.
"	13	41/-	40/3	37/7½	36/10½	9d.	9d.
"	20	39/-	38/1½	37/3	36/3	1/-	1/-
"	27	37/6	36/9	37/-	36/1½	9d.	10½d.
July	4	37/6	36/6	37/1½	36/4½	10½d.	9d.
"	11	36/10½	36/1½	37/10½	37/4½	9d.	6d.
"	18	36/10½	36/-	35/7½	35/-	6d.	7½d.
"	25	37/9	37/-	39/3	38/9	6d.	6d.
Aug.	1	35/3	34/9	36/6	36/-	6d.	6d.
"	8	39/3	38/9	35/9	35/3	6d.	6d.
"	15	36/6	36/-	33/10½	32/6	10½d.	9d.
"	22	35/6	35/-	33/3	32/9	6d.	6d.
"	29		34/-	32/9	31/9	7½d.	4½d.
Sept.	5		32/9	30/4½	29/10½	4½d.	6d.
"	12	32/9	32/3	30/9	30/-	6d.	9d.
"	19	32/1½	31/6	29/6	28/9	2½d.	9d.
"	26	30/4½	30/-	28/3	29/-	3d.	3d.
Oct.	3	30/6	30/-	28/9	29/6	6d.	6d.
"	10	28/9	28/7½	30/-	29/3	9d.	9d.
"	17	28/6	28/3	28/7½	27/10½	1/-	9d.
"	24	29/3	28/9	28/-	27/6	9d.	6d.
"	31	29/3	28/6	26/10½	26/3	9d.	7½d.
Nov.	7	28/3	27/3	27/-	26/3	1/-	9d.
"	14	27/6	26/9	27/4½	26/9	1/-	7½d.
"	21	26/-	25/3	24/10½	25/6	1/-	9d.
"	28	26/3	25/3	24/-	23/6	1/2½	6d.
Dec.	5	26/9	25/9				
"	12	25/9	24/9				
"	19	24/3	23/3				
"	24	23/9	22/7½				
1931							
Jan.	2	23/6	22/3	24/-	23/3	1/3	9d.
"	9	24/6	23/-	24/6	24/-	1/6	1/6
"	16	24/3	23/-	24/9	24/-	1/3	9d.
"	23	24/4	23/3	24/9	24/4½	1/3	4½d.
"	30	24/9	23/9	25/3	24/9	1/-	6d.
Feb.	6	25/6	24/6	25/10½	25/7½	1/-	3d.
"	13	26/6	25/3	26/7½	26/3	1/3	4½d.
"	20	27/3	26/3	27/9	27/4½	1/-	4½d.
"	27	26/-	25/-	26/3	26/-	1/-	3d.
Mar.	6	25/4½	24/3	25/7½	25/3	1/1½	4½d.
"	13	26/-	24/9	26/4½	26/-	1/3	4½d.
"	20	25/3	23/9	25/4½	25/-	1/6	4½d.
"	27	24/10½	23/6	25/-	24/9	1/4½	3d.
April	2	24/7½	23/3	24/9	24/3	1/4½	6d.
"	10	25/1½	23/10½	25/1½	24/7½	1/3	6d.
"	17	26/9	25/9	27/-	26/6	1/-	6d.
"	24	26/4½	25/3	26/6	25/9	1/1½	9d.



PARCEL PRICES (C.I.F. ENGLISH PORTS) Per 480 LB.—Continued

		Vancouver		Atlantics		Spread 1°-2°	
		1°	2°	1°	2°	Vancouver	Atlantics
1931							
May	1	26/7½	25/3	26/6	25/7½	1/4½	10½d.
"	8	26/6	25/6	26/6	25 7½	1/-	10½d.
"	15	26/9	25/6	26/7½	25 7½	1/3	1/-
"	22	26/-	24/7½	25/4½	24 6	1 4½	10½d.
"	29	25/3	24/-	24/7½	23 9	1 3	10½d.
June	5	25/-	24/-	25 1½	24 1½	1 -	1/-
"	12	File missing.					
"	19	24/6	23/-	24/3	23 3	1 6	1/-
"	26	25/3	23/10½	25/-	24/-	1/4½	1/-
July	3	25/3	23/9	25/-	24/-	1 6	1/-
"	10	24/4½	22 9	24/4½	23/4½	1 7½	1/-
"	17	23 9	22/3	23/10½	22/10½	1/6	1/-
"	24	23 1½	21/7½	23/6	22/6	1/6	1/-
"	31	File missing.					
Aug.	7	21/-	20/-	21/9	20/9	1/-	1/-
"	14	File missing.					
"	21	"					
"	28	22/10½	21/4½	22/10½	21/9	1/6	1/1½
Sept.	4	22/-	20/3	22/1½	20/9	1/9	1 4½
"	11	22/3	20/6	22/-	20/7½	1 9	1 4½
"	18	22/6	20/6	22/1½	20/10½	2/-	1 3
"	25	29/6	27/3	29/3	27 9	2 3	1/6
Oct.	2	25/3	23/3	25/6	23 9	2 -	1/9
"	9	File missing.					
"	16	27/9	25/4½	28/-	25/6	2 4½	2/6
"	23	29/	26/6	29/1½	26 6	2 6	2/7
"	30	31/7½	28 9	31/-	28 10½	2/10½	2/1½
Nov.	6	35/-	32/-	34 6	32 -	3/-	2/6
"	13	32/9	29/9	32/9	30 ½	3/-	2/7½
"	20	32/9	29 6	32/3	29 9	3 3	2/6
"	27	31/6	28/3		28 10½	2/9	
Dec.	4	32/6	29/4½		30/-	3/1½	
"	11	31/7½	28/7½			3/-	
"	18	30/10½	27/10½			3/-	
"	24	30 7½	27/9			2/10½	
"	31	31/6	28/6	32/3	29/9	3/-	2/6
1932							
Jan.	8	32/3	29/3			3/-	
"	15	30/10½	27/10½			3/-	
"	22	31/6	28/6			3/-	
"	29	30/10½	28/1½			2 9	
Feb.	5	31/10½	29/3			2/7½	
"	12	32 6	29/10½			2/7½	
"	19	33/10½	31/6			2 4½	
"	26	34/7½	32 6			2/1½	
Mar.	4	34/1½	31/10½			2/3	
"	11	33 7½	31 4½			2/3	
"	18	32/3	30/-			2/3	
"	24	30 7½	28 4½			2/3	
April	1	29/9	27/7½			2/1½	
"	8	30/4½	28/4½	31/-	29/1½	2/-	1/10½
"	15	30/9	28/9	31/9	29/10½	2/-	1/10½
"	22	30/3	28/6	30/10½	29/3	1/9	1/7½
"	29	29/4½	27/7½	30 1½	28/4½	1/9	1/7½
May	6	29/4½	27/6	29/7½	28 -	1/10½	1/7½
"	13	29/-	27/6	29 7½	28 1½	1/6	1/6
"	20	28/10½	27 4½	29/4½	28/-	1/6	1/4½
"	27	28/10½	27/7½	29/6	28/3	1/3	1/3
June	3	28/-	26/7½	28/4½	27/1½	1 4½	1/3
"	10	25/3	24 3	25/6	24/4½	1/-	1/1½
"	17	25/7½	24 3	25/6	24/7½	1/4½	10½d.
"	24	25/6	24/-	25/6	24/4½	1/6	1/1½
July	1	25/3	23/10½	25/6	24/1½	1/4½	1/4½
"	8	25/9	24/1½	26/1½	24 9	1/7½	1/4½
"	15	25/3	23/9	25/6	24 4½	1 6	1/1½
"	22	25/9	24/6	26/1½	25/-	1 3	1/1½
"	29	28/6	27/-	28/6	27/6	1 6	1/-
Aug.	5	27/9	26/3	27/7½	26/6	1/6	1/1½
"	12	28/6	27/4½	28/6	27/4½	1/1½	1/1½
"	19	27/9	26/7½	28/-	26/9	1/1½	1/3
"	26	27/3	26/3	27/6	26/4½	1/-	1/1½



PARCEL PRICES (C.I.F. ENGLISH PORTS) PER 480 LB.—*Concluded.*

		Vancouvers		Atlantics		Spread 1°—2°	
		1°	2°	1°	2°	Vancouvers	Atlantics
1932							
Sept.	2	27/6	26/7½	28/-	26/9	10½d.	1/3
"	9	27/9	27/1½	28/3	27/3	7½d.	1/-
"	16	27/-	26/-	27/6	26/6	1/-	1/-
"	23	26/9	26/4½	27/6	26/9	4½d.	9d.
"	30	26/4½	26/-	27/1½	26/4½	4½d.	9d.
Oct.	7	25/9	25/3	26/6	26/-	6d.	6d.
"	14	25/6	25/1½	26/9	26/-	4½d.	9d.
"	21	26/-	25/7½	27/3	26/4½	4½d.	10½d.
"	28	26/4½	25/9	26/10½	26/3	7½d.	7½d.
Nov.	4	25/7½	25/3	25/9	25/4½	4½d.	4½d.
"	11	25/7½	25/4½	26/-	25/6	3d.	6d.
"	18	25/4½	25/-	25/6	25/1½	4½d.	4½d.
"	25	File missing.					
Dec.	2	26/-	25/7½	26/9	26/1½	4½d.	7½d.
"	9	25/6	25/-			6d.	
"	16	24/6	23/7½			10½d.	
"	23	23/6	22/9			9d.	
"	30	24/-	23/6			6d.	
1933							
Jan.	6	25/6	24/10½			7½d.	
"	13	File missing.					
"	20	25/1½	24/9			4½d.	
"	27	File missing.					
Feb.	3						
"	10						
"	17						
"	24	24/-	23/6			6d.	
Mar.	3	23/7½	22/9			10½d.	
"	10	25/-	24/1½			10½d.	
"	17	25/10½	24/10½			1/-	
"	24	24/4½	23/6			10½d.	
"	31	24/-	23/-			1/-	
April	7	24/9	24/-			9d.	
"	13	25/4½	24/6			10½d.	
"	21	25/7½	24/7½			1/-	
"	28	25/6	24/10½			7½d.	
May	5	27/3	26/10½			4½d.	
"	12	27/9	27/3			6d.	
"	19	27/3	26/4½			10½d.	
"	26	26/4½	25/9	26/7½	26/0	7½d.	7½d.
June	2	26/10½	26/3	27/1½	26/9	7½d.	4½d.
"	9	25/9	25/3	25/9	25/7½	6d.	1½d.
"	16	26/6	25/9	26/10½	26/6	9d.	4½d.
"	23	27/1½	26/1½	27/1½	26/6	1/-	7½d.
"	30	28/9	28/-	29/-	28/1½	9d.	10½d.
July	7	30/4½	29/6	30/4½	29/7½	10½d.	9d.
"	14	31/7½	31/1½	31/9	31/4½	6d.	4½d.
"	21	30/-	29/3	30/6	29/9	9d.	9d.
"	28	33/6	32/6	33/6	32/9	1/-	9d.
Aug.	4	33/3	31/3	33/3	31/7	2/-	1 8
"	11	30/6	29/9	31/-	30/4½	9d.	7½d.
"	18	27/9	26/9	27/10½	27/3	1/-	7½d.
"	25	27/-	26/-	26/10½	26/1½	1/-	9d.
Sept.	1	27/7½	26/7½	27/6	26/9	1/-	9d.
"	8	27/7½	26/9	27/6	26/10½	10½d.	7½d.
"	15	26/9	25/9	26/6	25/10½	1/-	7½d.
"	22	File missing.					
"	29	25/1½	24/3	25/-	24/4½	10½d.	7½d.
Oct.	6	24/4½	23/9	24/3	23/6	7½d.	9d.
"	13	24/3	23/3	24/3	23/6	1/-	9d.
"	20	24/4½	23/3	23/7½	22/9	1/1½	10½d.
"	27	25/6	24/3	24/9	24/-	1/3	9d.
Nov.	3	25/7½	24/1½	25/-	24/6	1/6	6d.
"	10	25/1½	23/9	24/4½	24/-	1/4½	4½d.
"	17	25/-	23/9	24/9	24/3	1/3	6d.
"	24	25/6	24/3	24/10½	24/1½	1/3	9d.
Dec.	1	24/7½	24/3	24/9	24/1½	1/4½	7½d.
"	8	24/9	23/4½	25/-	24/4½	1/4½	7½d.
"	15	24/3	22/10½	24/6	23/9	1/4½	9d.
"	22	File missing.					
"	29	25/-	23/7½	25/3	24/7½	1/4½	7½d.

*By Hon. Mr. Weir:*

Q. Just before we leave that: the subject that the committee is concerned with is the effect of Garnet in No. 2; and in that connection I would suggest that it would not be a scientific comparison to compare No. 1 Vancouver with No. 2 Vancouver, and the same at the Atlantic. But if we have at Vancouver practically the same amount of wheat going forward each year over a period, and the chief difference there between No. 1 and No. 2 is Garnet in the No. 2, then I would say that the price paid by the millers after three or four years, with pretty extensive knowledge for three or four years, and extensive dealings in our wheat (No. 1 and No. 2), that in spite of that when they will pay such a comparatively high price for No. 2 containing Garnet in large quantities in comparison to No. 1; that that is really about the only way we can take these together to get their relative values.

The CHAIRMAN: Are there any further questions? If not we will ask Dr. Newton to retire.

The Witness retired.

Gentlemen, I think that completed the evidence so far as the recommendations of the sub-committee are concerned.

Hon. Mr. MOTHERWELL: Mr. Chairman, might I draw your attention to the fact that Mr. Ramsay is here. When Mr. Ramsay gave his major evidence it was about ten minutes to one o'clock, and you asked me to discontinue my "conversation" (was it) and give Mr. Ramsay an opportunity to get in his evidence before one o'clock. Well now, I have not had an opportunity to read his evidence, but I think I know pretty well what Mr. Ramsay said, and I would like to have the privilege of asking him a few questions.

The CHAIRMAN: Certainly, Mr. Motherwell; Mr. Ramsay gave his evidence at that time, and as he is here I think the committee will be agreeable to having him recalled.

Mr. E. B. RAMSAY, recalled.

*By Hon. Mr. Motherwell:*

Q. There is nothing very terrible in what I am going to ask or say. I took it from Mr. Ramsay's evidence that there was going to be a sort of "chaos" in connection with the marking of our wheat, and our certificate final—I do not know that that was mentioned, about the certificate final—but there was quite a lot of force in the delivery of his evidence, and he gave it quite so earnestly, that he thought that the time had come when we should settle this question of having Garnet graded separately. Now, if the Board of Grain Commissioners says that, it carries a lot of weight with me. But maybe Mr. Ramsay would reconcile that with his evidence in the report here; all that evidence that you gave was as a result of your visit overseas at the instance of your minister in 1932. Well then, after getting all that information that you gave out, then in your annual report signed by yourself to your minister you said (at page 6 of the report of 1933), "the board has continued to investigate the effect of allowing Garnet wheat to be placed in No. 2 Manitoba Northern Wheat. We are substantially in agreement that Garnet wheat should be given a separate classification, but in view of the present low price of wheat and the difficulties of the wheat producer, we are of the opinion that it might not be advisable to proceed with changes in the classification at the present session."

Well now, that is exactly what we are doing. We are talking about this classification, this present session, against the advice of the Board of Grain Commissioners when they had all of this information in their possession on the 8th day of January last.

Mr. Hamilton gave some supplementary evidence, but it was pretty unconvincing I thought, some of it was even obtained after the bill was on the order paper.

If Mr. Ramsay in his supplemental evidence if any, and also Mr. Hamilton, wish to advise against their own report of the 8th of January, then we should listen to it carefully; and I might say it would bear a lot of weight with me, I have no feeling in this matter except to get the truth. I know where the southern farmers are trecking to. I have met them by the hundred going up into what they call "God's country," the north. I have known the pioneer life and all that; and I tell you I cannot help feeling sympathetic for pioneers; and if you can just give us something to hang our hats on, Mr. Ramsay, to justify this change in policy of grading it separately—as to my mind that only means killing it. You have not seen as many years as I have, they go back over a long period; but I have never known of wheat excluded from the word "Manitoba" to live—some of them didn't deserve to live anyway—but I never saw one excluded from the use of the word "Manitoba" or "Northern" that lived over 3 or 4 years. But if you say in your judgment that you believe like Dr. Newman, that it can get out on its own and stand the gaff, that it is well enough known—and what it means to be deprived of "Manitoba Northern"—if you can give us some assurance on that from your journey of acquired information we will not discount it I can assure you, we will attach to it all the value it deserves. But there must be some real good reason why you are making a different recommendation now to what you did on the 8th of January. To give full value to your evidence, we would like to hear it?—A. Garnet wheat was being graded No. 2 Northern when our Board took office. I do not think Garnet wheat has had any better friend than the Board of Grain Commissioners and the Grain Standards Board.

Q. That is right, I think that?—A. When we made this report that was our opinion at that time. Since then there have been developments which have been quite serious from the Canadian standpoint. It is only by the intervention of disaster that the country is escaping from an impossible situation. That is my view of it, Mr. Motherwell.

Q. You mean, the crop situation?—A. I feel obligated to do what I can in a fair way, having in view the broad picture for the producer, not only in the north but in the south; and these are entirely the motives that have actuated me in putting this evidence before the committee.

Q. I do not know why, I understand that was not—?—A. What I mean to say is, Mr. Motherwell, in view of the wheat supply situation.

Q. In view of what?—A. In view of the wheat supply situation. The situation to-day is much more serious than it would be if our visible supply was only eighty million bushels.

Q. You mean, because of the large carry over?—A. Because of the unwieldy amount of wheat we have in the country, and you cannot re-establish the market until you get rid of that; that is my own personal view.

Q. Does that mean that we would grow less wheat yield if some other variety were substituted?—A. No, Mr. Motherwell; what I am trying to get across is that if they say, your certificate on No. 2 Northern Wheat is not No. 2 Northern Wheat, we have to pay attention to them. If you ask them, can we use this Garnet wheat; they say we are trading in No. 2 wheat and we want to have that wheat in its natural condition.

Q. You think then that the world situation has changed sufficiently since the 8th of January to take the attitude which you are now taking?—A. No, I do not.

Q. Why the change then; why do you take a different attitude now if the world situation is not different; the world situation, you say, is not different from what it was on the 8th January—it cannot be both different and not different?—A. I can't tell you that, Mr. Motherwell. The world situation at



the present time is based on the supplies of wheat in Europe. It is a general market condition for which no one is particularly responsible. It is just that a bountiful nature has given a flood of wheat. We have a specialty to sell, and we are trying to sell it to the best of our ability.

Q. You think then that the more they grow their own wheat out there the less we will export; they are catering to their wheat growers over there, and they are excluding us out of their market?—A. In a buyer's market the buyer makes the market.

Q. They sure do, as we have found out. Would they exclude us from their markets if we do not make this change?—A. They might exclude us still further if we do not.

Q. By gum, they are doing it right now, more every day?—A. I would not want to be responsible for a further exclusion.

Q. But in Europe and Great Britain they are using more home-grown wheat, bonusing it to the exclusion of our wheat?—A. I would say the future is quite obscure.

Q. You take the ground they are doing more of that now than they did last January?—A. Yes.

Q. That may be your conclusion, but I would come to a different conclusion; inasmuch as our wheat is going to be excluded anyway why upset our farmers also. I have nothing further to add, Mr. Chairman.

*By Mr. Davies:*

Q. I would like to ask Mr. Ramsay a question: Has the Board of Grain Commissioners ever had any control over the spread at which a given wheat goes on the market; and have you ever thought it desirable that you should?—A. No, there has never been any regulation of our grain exchanges, it has always been an open market. We are concerned with the handling of wheat, inspection and weighing.

Mr. VALLANCE: With the administration of the Act.

*By Mr. Davies:*

Q. The first witness we had before this Committee, I think it was Mr. Sidney B. Smith, the representative of the large grain exporting house in Winnipeg, told this committee that the different ones—I presume he meant members of the exchange—had discussed at what price this wheat should go on the market, and it appears that their discussions varied all the way from a discount of 3 cents to a discount of 8 cents; and I thought at the time it was a rather arbitrary authority, that those connected with that business should have the power to determine at what spread this wheat if it were graded separately should go on the market; and I wondered if it has always been that way, and if it is desirable that it should continue that way?—A. What they do, Mr. Davies, is to set a maximum spread; just as we set a maximum tariff for elevators. The maximum spread is just a pegged point, at which they expect the market to do better.

Q. You think it is desirable?—A. It has worked quite satisfactorily under Grain Exchange Control.

The CHAIRMAN: Are there any other questions? If not, we will let Mr. Ramsay retire.

The witness retired.

The CHAIRMAN: Well then, gentlemen, we come to a consideration of the bill itself.

Discussion followed.



Hon. Mr. MOTHERWELL: We should have a meeting at which would be present the Minister of Trade and Commerce and the Board of Grain Commissioners. They, no doubt prepared this Bill, and they should know what it means. For instance, I think it means one thing and Mr. Carmichael thinks it means another. Somebody should decide—either the Minister of Trade and Commerce or his officers who drafted the Bill. As I understood from a conversation with Mr. Stevens the matter was to go to the Grain Standards Board and they would handle it like any other commercial grade.

Mr. CARMICHAEL: As I understand the meaning of section 2, Mr. Chairman, it is that we will establish number 2 Northern in such a way that Garnet cannot get into it. It does not go further and say that we shall establish separate grades for Garnet.

Hon. Mr. MOTHERWELL: I think the Minister of Trade and Commerce under whose jurisdiction this Bill lies and who has sponsored it in the House, should tell us what it means.

Mr. RAMSAY: You are extending the provisions of 1 Hard, 1 Northern to 2 Northern, and by doing so you exclude varieties which are not recognized as being equal to Marquis. Now, that leaves Garnet wheat outside of 2 Northern. Then, the Grain Standards Board would decide whether there was sufficient volume of that wheat to justify separate grades on the basis that you would not be justified in grading Garnet wheat 3 Northern—you think it would be better than 3 Northern so you set up standards to deal with it and market it on its own responsibility.

Hon. Mr. MOTHERWELL: My interpretation is right: we are delegating this to the Grain Standards Board to deal with it like any other commercial grade?

Mr. RAMSAY: Exactly.

Mr. VALLANCE: Are we going to get any assurance that by this Bill there will be separate grades. Have I got to go back and tell the growers of Garnet in the Battlefords that they are going either into grade 3, according to this Bill, or if the Grain Standards Board sees fit separate grades will be set up? I do not think I could justify that action. I think there should be some specific mention in this Bill that there will be separate grades for Garnet.

Mr. RAMSAY: The alternative would be to make it a statutory grade.

Mr. BROWN: Would it not be well to have Garnet specifically mentioned in this Bill?

Mr. VALLANCE: This Bill refers to all varieties, so you must include in all varieties the grades you are going to set up, if any, or put into number 3, other than Marquis wheat.

Hon. Mr. MOTHERWELL: This creates a precedent. We are told there are more good wheats coming along, and under this precedent in the future before anything is accepted into Northern grades it will have to be submitted to the Grain Standards Board. Now, is that what will be done? This Board is a packed jury to-day as it has already adjudicated on this problem twice—once being ex-ported, and with the pretence of making it more fair a Reward grower up in the north is added thereto. That is what I object to, and there will have to be a lot of evidence to convince me that I am wrong in this respect or that that is the best way to solve this many-sided question.

Mr. RAMSAY: When the Act was drafted special provision was made for the personnel of the Grain Standards Board. There is no trade represented. It is a producers' body. I can assure you from my knowledge of the men on that board that even the man who grows Reward wheat is capable of being fair to somebody who is growing another wheat.

Hon. Mr. MOTHERWELL: Well, I do not want to enter into an argument; you are not on as a witness now are you?

Mr. RAMSAY: I was asked to explain the Bill. Mr. Chairman, there is no objection to making them statutory grades. The only difficulty in connection with that is setting the standard. We had thought of operating it as a commercial grade for a year or two and allow the market to define its attitude, and then there is absolutely no objection to making statutory grades.

The CHAIRMAN: I think, gentlemen, we should adjourn and meet again.

Mr. DUPUIS: Mr. Chairman, before adjourning, I would like to say as an outsider in all this matter of grain which grows best in western Canada that this committee should send a resolution of congratulation to our good fellow Canadian Dr. Saunders who has been honoured by His Majesty for having developed the finest wheat in the world. I propose, with the unanimous consent of the committee, that a resolution of congratulation be forwarded to Dr. Saunders.

The CHAIRMAN: Much as I would like to do it, I am afraid the matter is outside the scope of this committee.

Mr. DUPUIS: We are meeting here as a committee on agriculture, and, of course, I feel sure that the members of this committee are loyal to the King, and the King can do no wrong. I would like the chairman to decide.

The CHAIRMAN: I certainly said that I am satisfied that the matter is outside of the scope of our work as a committee. Furthermore, you are without a seconder, Mr. Dupuis.

Mr. DUPUIS: All right, then, the King is able to do wrong.

The CHAIRMAN: I do not think you should view it in that manner. We would like to do as you ask, but we have a special reference to this committee.

Mr. DAVIES: I would like to hear what Mr. Hamilton has to say on this question of Garnet wheat before we close.

Mr. HAMILTON: Before we adjourn, I would like to have the opportunity to address the committee for a moment as to what the effect would be of the passing of this Bill. I think if this Bill were passed and it were still left in doubt as to whether separate grades would be provided for Garnet or not, either immediately or at some future date, that it would not meet with the general satisfaction of the people. I have heard the view expressed here and elsewhere on numerous occasions that something definite should be done. From my point of view, I think it is proposed to do something definite if we pass this Bill—that is to say, it is proposed to exclude Garnet wheat and certain other varieties which are not equal to Marquis from No. 2 Northern grade. It is true to a degree that it is left in the hands of the Western Committee on Grain Standards to the extent that the Western Committee will be charged with the responsibility of deciding what grades and the definitions for the various grades that would be decided upon. It is equally true that there is no compulsion on the Western Committee to act, but the Western Committee on Grain Standards has upon different occasions given consideration to this question and has decided by a majority that special grades should be provided for Garnet wheat. I think that the Western Committee feels that the matter has been delayed longer than it should have been delayed. Now, I think we are justified in coming to the conclusion that members of the Western Committee on Grain Standards will act as reasonable men. I think, in law, there is such a presumption that under certain conditions men will act as reasonable men. I think we have every reason to believe that the Western Committee on Grain Standards will act as reasonable men, having considered this question three times. The Parliament of Canada by this Bill is making provision and clearing any legislative doubt that may exist. If the committee and parliament prefer to embody the grades by legislation and make them statutory under the Act, well and good; it is your privilege to decide that question; but the only point I wish to make is that you have every reason to be confident that in passing this Bill definite action is being taken and that safeguards will be provided for Garnet wheat not later than the time mentioned in that Bill.

Mr. CARMICHAEL: I think there should be separate grades in the statutory grades established for Garnet or equal varieties under the present statutory grades as there are for Marquis or equal to Marquis.

Mr. RAMSAY: All that is necessary is to put a schedule in the Act; then you will have your grades. It is difficult to change a schedule; that is one reason why we left it as it was. We can easily prepare a schedule and put it before the committee; but as far as creating grades for Garnet is concerned the big problem, Mr. Carmichael, is the mixture of Garnet with other grades—elevator mixtures, country elevator mixtures. That is the big problem. You get a certain amount of pure Garnet within 1 and 2, but the big difficulty is with the mixtures.

Mr. VALLANCE: Do you think it is possible to-day for a country elevator operator to segregate Garnet wheat from the other wheats and send it out 100 per cent pure and get it into 1 Northern Garnet the same as we demand for 1 Marquis wheat?

Mr. RAMSAY: I am not so concerned with the country elevator as I am with the grower of Garnet wheat when special binning. I know that the elevator man is going to have a lot of difficulty. What I am trying to do is to protect the grower of Garnet wheat who, by special binning, can get his proper grade.

Mr. DAVIES: Don't you think it is essential that there should be a certain amount of discretion left in the hands of the Grain Standards Board because as the crop varies from year to year they will make some changes?

Mr. RAMSAY: They can have all the discretion parliament wishes to grant them. If you want to make statutory grades, that is your privilege.

Mr. DAVIES: Do you not think if you do not leave some discretion with the Grain Standards Board that it may get us into considerable difficulty?

Mr. RAMSAY: It will complicate the situation somewhat. Personally, I would not have put the proposal in its present form unless I had considerable confidence in the Grain Standards Committee. If there was any man on it whom I did not approve of personally I would have considered very seriously changing him.

Mr. VALLANCE: Without setting up a statutory grade for Garnet wheat how is the purchaser of wheat to know what he has got. When he buys 1 Northern or 2 Northern he knows because it is defined in the Statute. Unless you stipulate, I do not know how he is going to purchase intelligently?

Mr. RAMSAY: Of course, they are used to commercial grades. The rusted wheats are usually put in separate grades. The Grain Standards committee does that because they think they can market them better.

Mr. VALLANCE: The commercial grades are all below 4.

Mr. RAMSAY: Oh, no.

Mr. VALLANCE: Well, statutory grades are from 1 to 4.

Mr. RAMSAY: You can create a commercial standard and send that as it is to the trade and then they know what to expect.

Mr. VALLANCE: I would hate to leave it in that position.

The Committee adjourned to meet on Thursday, June 7th.





















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